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THIRTIETH ANNUAL REPORT

RELATING TO THE

REGISTRY AND RETURN

OF

BIRTHS, MARRIAGES AND DEATHS

MICHIGAN

FOR THE YEAR 1896

BY THE SECRETARY OF STATE OF THE STATE OF MICHIGAN

EDITED BY

CRESSY L. WILBUR, M. D.,
CHIEF OF THE DIVISION OF VITAL STATISTICS



BY AUTHORITY

LANSING
ROBERT SMITH PRINTING COMPANY, STATE PRINTERS AND BINDERS
1898

AUTHORITY FOR PUBLICATION AND DISTRIBUTION.

HOWELL'S ANNOTATED STATUTES, SUPPLEMENT 1883-1890. SECTIONS 26g, 26j, AND 26n, BEING SECTIONS 7, 10 and 14 OF PUBLIC ACT NO. 122 of 1889.

§ 26g. SEC. 7. There shall be published a sufficient number of copies of the reports of the several officers, boards of officers, and public institutions of this State, now or hereafter required to make reports, not mentioned in sections with interest of this set, and be bound together as joint documents of the fiscal or calendar year for which shall reports are made; to supply the following persons, officers, libraries, corporations and societies, viz: State officers and their deputies, ex-State officers, libraries of State officers, and libraries of State institutions, members and libraries of State boards, senators and representatives of this State in Congress, the United States senate library and the library of Congress, members of the legislature of the year for which said joint documents are published, justices of the supreme court, judges of the circuit courts, county clerks, county treasurers and judges of probate, public, free and incorporated libraries, public schools having a library, and publishers of newspapers published at that time in this State. That in addition to the foregoing there shall be published of said reports as joint documents, three hundred and fifty copies, one hundred and fifty copies of which shall be deposited in the State library for use in said library and for exchanges and the remaining two hundred copies shall be deposited in the office of Secretary of State to supply future demands.

§ 26j. Sec. 10. That a sufficient number of copies of the annual report of the Secretary of State on births, marriages and deaths shall be printed and bound for distribution, in the same manner as the joint documents; also a sufficient number to supply the officers making returns of births and deaths compiled in said report or their successors in office with one copy each, for depositing one hundred and fifty copies in the State library for use in said library and for exchanges, two hundred copies in the office of the Secretary of State as in the case of the joint documents, and two hundred copies in the office of the State board of health for distribution by said board in their discretion.

§ 26n. SEC. 14. That it shall be the duty of the Secretary of State to direct and oversee the prompt distribution of the laws, journals, documents, and reports mentioned in this act, whose distribution is not otherwise provided for: and said laws, journals, documents and reports shall be shipped to the several county clerks in the State, and be distributed by them to the persons, officers, corporations, and societies within their respective counties entitled to the same, and that, until so distributed, they shall be carefully preserved by said county clerks. That the accounts for boxes furnished to the Secretary of State for package and distribution shall be audited and allowed by the board of State auditors and paid out of the State treasury, and the expense of transportation from the office of the Secretary of State to the county clerks, and of distribution by the county clerks to the persons entitled to the same shall be audited and allowed by the boards of supervisors and paid out of the county treasuries: *Provided*, however, That the Secretary of State may, in his discretion, personally deliver or ship directly to any of the persons, officers, corporations, or societies entitled to any book or books mentioned in this act.

Applications for this Report should be made directly to the Secretary of State, Lansing.

LETTER OF TRANSMITTAL.

MICHIGAN,
DEPARTMENT OF STATE,
Lansing, November, 1898.

HON. HAZEN S. PINGREE, Governor of Michigan:

SIR—I hereby transmit, in accordance with law, the Thirtieth Annual Registration Report of Michigan, containing the statistics of the births, marriages and deaths that were reported as having occurred in this State during the year 1896.

This Report is somewhat delayed, owing to the tardy returns provided by the old registration law. The new registration law for deaths went into effect on August 29, 1897, and from that time to the present a regular *Monthly Bulletin of Vital Statistics* has been issued by this Department. The Report for the present year, 1898, will be issued early next year. Thus, timely and reliable mortality statistics having become available for the State, the old series of reports, of which this is the last volume but one, becomes of less importance.

The laws for the collection of deaths, marriages and divorces are now in excellent condition in this State. That for the collection of births needs revision, no change having been made therein since 1869. The complete success of the improved method of registering deaths would seem to justify a similar change in the registration of births. It is believed that prompt and efficient registration of the latter can be had with but slightly increased expense over the tardy and imperfect returns under the present system.

In making this, my final report of the work in the Division of Vital Statistics, I desire to improve the opportunity to express my appreciation of the valuable services rendered the State by Dr. Cressy L. Wilbur, the accomplished Chief of that Division.

Very respectfully,

WASHINGTON GARDNER,

Secretary of State.

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ERRATA.

In synopsis of tables relating to marriage, on page 47, numbers 34 and 35 should be transposed. In synopsis of tables relating to causes of death, on page 125, numbers 75 and 76 should be transposed. In Table 68a, page 126, second column, read "Total deaths, 1896."

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THIRTIETH ANNUAL

REGISTRATION REPORT OF MICHIGAN.

PART I.-VITAL STATISTICS AND POPULATION, 1896.

This part of the Annual Registration Report contains the general tables comparing the returns of births, marriages and deaths for the year 1896 in every county of the State, and also showing how the total number of such returns for the State compares with the results of previous years. This latter comparison is necessarily made on the basis of rates per 1,000 population, as the aggregate number of returns of each class would normally show an increase depending on the increase of population. The relation of the vital statistics, and especially the statistics of births and deaths, to an element of the increase of population, viz., the natural increase or excess of births over deaths, is also shown.

The Michigan statistics of marriages are reliable, and comparable without correction for omissions with the statistics of any State or country. The statistics of births and deaths, as given in this and all preceding Reports, are not fully reliable (except for certain purposes not requiring an exhaustive registration), and must be increased by an uncertain, variable and practically indeterminable percentage before the rates based on them can be compared with accurate natality or mortality statistics. It has been the custom of the compilers of this Report, in default of any other and better statistics, to endeavor to derive as much valuable information from the imperfect data collected under the old registration law as possible. With the utmost pains, however, the conclusions were subject to question on account of the lack of accurate rates, and for this reason much of the work done on the Michigan vital statistics for years past has been practically wasted. Certainly it has met with very little acceptance and use in the statistical world, which cannot be expected to struggle with faulty data, and examine hypothetical conclusions based thereon, when reliable statistics are elsewhere available. In this respect Michigan has been on a par with the country as a whole, which has continued to put forth for half a century, in the vital statistics of the decennial censuses, mortality statistics which were only a degree superior to the Michigan data.

A change is at hand, and for this State the act passed in 1897 and going into practical effect on August 29, 1897, has for the first time put our mortality statistics on a satisfactory basis. A law for the registration of divorces was also passed by this

session of the legislature, so that beginning with 1897 we have reliable returns of deaths and divorces based upon immediate registration. As stated before, our marriage statistics are of an excellent character, and have been satisfactorily returned since the marriage license law of 1887. We have remaining, then, under the old, imperfect system, only the returns of births, and there is little doubt that the legislature, at an early day, will so change the method of collecting these returns that the results will be more accurate and properly compare with the returns of deaths, marriages and divorces.

It accordingly seemed proper in the preparation of the present Report to make the observations on the imperfect returns of births and deaths as brief as possible, and to present only the usual series of tables so that comparisons might be continued down to the close of the old system. No new studies have been begun, as the principal work of the Department relative to vital statistics has been directed to the administration and compilation of data under the new registration law (Public Act No. 217 of 1897). The preliminary results under this law have already appeared from month to month in the *Michigan Monthly Bulletin of Vital Statistics* issued by this Department, and the detailed data for the year 1898 will appear in the next Annual Report.

SUMMARY OF REGISTRATION RETURNS FOR THE YEAR 1896.

The following are the general results of registration for 1896. For further particulars see the summaries at the beginning of each part of this Report, and also the general list of tables and alphabetical index:

Total number of marriages,			•	•		18,897
Persons married,	-	•	•		-	37,794
Persons married per 1,000 estimated population,	•		-	-		16.8
Total number of births,	-	-	-		-	46,302
Births per 1,000 estimated population, -	-	•		•		20.0
Total number of deaths,	-				•	21,983
Deaths per 1,000 estimated population, -	•	-		-		9.5
Natural increase of population,	-	-	-		-	24,819
Natural increase per 1,000 estimated population,		-	•	-		10.5

PRESERVATION AND IMPORTANCE OF VITAL RECORDS.

From the beginning of registration, April 5, 1867, to the close of the year covered by this Report, 1896, there have been registered the following total numbers of returns of each class:

Total number of marriages registered,			-		-		•			488,649
Total number of births registered,		-		-		-		•		1,181,603
Total number of deaths registered,	-		•		-		-		-	483,322
Aggregate number of births, marr	iag	es	and	de	ath	8,				2,058,574

These returns are all preserved in the office of the Secretary of State at Lansing, in bound volumes, carefully indexed, and are available for consultation by any citizen of the State. Certified copies of particular entries are frequently applied for and made upon payment of a nominal fee, barely covering cost of time of clerk engaged in searching for the name upon the indexes. All fees are, of course, covered into the State Treasury. The information supplied is often of the greatest personal and legal importance to individuals, aiding in the establishment of claims

to inheritances, pension claims, and the like. The laws of most European countries are very strict, requiring official proofs of marriage, birth and death, before, for example, property devised to a deceased resident of Michigan will be surrendered to his widow or children.

Synopsis of tables showing the general results of registration of vital statistics in Michigan and their relation to population.

Table.	Vital statistics and population.
1.	Marriages, births, deaths and natural increase of population in Michigan in 1896.
	Vital rates.
2.	Relation of registration returns to population, giving the number of persons married, births, deaths and natural increase of population per 1,000 inhabitants for each year of the period 1868-96 (stillbirths included in births and deaths).
3.	Births and deaths, birth rates and death rates, for the years 1867-96, with exclusion of stillbirths.
4.	Comparative table, showing the results of the National and State census enumerations of births and deaths in Michigan from 1870 to 1894.
	Registration by counties.
5.	Number of marriages, births, deaths and natural increase of population for each county of the State in the year 1896, with rates per 1,000 estimated population.
6.	Comparison of the returns of marriages, births and deaths from each county in the State for the year 1896, with the corresponding returns for 1895, showing the increase or decrease in each county of each class of returns.

VITAL STATISTICS RETURNED FOR 1896.

Table 1 gives a statement of the number of marriages, births, deaths and excess of births over deaths recorded for the year 1896. In order to make these numbers more easily comprehended, calculations are given of the average number of each returned for certain subdivisions of the year. Thus 52 marriages occurred, on the average, on each day of the year 1896 in the State. There were 127 children born and 60 deaths in the same time. The net daily increase of the population of the State, aside from the number added by immigration, was 67 persons.

Table 1.—Number of marriages, births, deaths and excess of births over deaths in Michigan during the year 1896, with the average number of certain subdivisions of the year.

Periods of time, 1896.	Marriages, 1896.	Births, 1896.	Deaths, 1896.	Excess of births over deaths, 1896.
Total for year	18,897	46,302	21,983	24,319
Average number per quarter	4,724	11,576	5,496	6,080
Average number per month	1,575	3,859	1,832	2,027
Average number per week	363	890	423	468
Average number per day	52	127	60	67

Table 2.—Number of marriages, births and deaths registered in Michigan from 1867 to 1896, with the excess of births over deaths for each year; also the rates per thousand of persons married, births, deaths and excess of births over deaths for each year based on populations of United States and State censuses, and estimated populations for intercensal years. (Stillbirths included in both births and deaths.)

	!	Regi	stration r	eturns, 18	67-96.	Rate	es per 1,0	00 popula	ion.
Years.	Population.	Number of mar- riages.	Number of births.	Number of deaths.	Excess of births over deaths.	Persons married.	Births.	Deaths.	Excess of births over deaths.
1867*	993,902	4,312	14,000	4,400	9,591				
1868	1,057,288	8,697	25,020	8,235	16,785	16.5	23.7	7.8	15.9
1869	1,120,673	8,459	27,093	9,145	17,948	15.1	24.2	8.2	16.0
1870†	1,184,059	9,791	26,663	10,766	15,897	16.5	22.5	9.1	13.4
1871	1,221,552	10,605	25,992	9,728	16,264	17.4	21.3	8.0	13.3
1872	1,259,045	10,752	27,993	13,371	14,622	17.1	22.2	10.6	11.6
1873	1,296,538	11,897	34,608	14,258	20,350	18.4	26.7	11.0	15.7
1874†	1,334,031	12,255	81,151	12,500	18,651	18.4	23.4	9.4	14.0
1875	1,384,515	11,851	31,958	11,990	19,968	17.1	23.1	8.7	14.4
1876	1,435,000	11,913	34,235	12,576	21,659	16.6	23.9	8.8	15.1
1877	1,485,484	11,899	33,395	12,919	20,476	16.0	22.5	8.7	13.8
1878	1,535,968	12,880	35,162	12,766	22,396	16.8	22.9	8.3	14.6
1879	1,586,453	13,892	34,122	14,407	19,715	17.5	21.5	9.1	12.4
1880†	1,636,937	14,935	35,323	16,102	19,221	18.2	21.6	9.8	11.7
1881	1,691,117	15,894	34,749	19,238	15,511	18.8	20.5	11.4	9.2
1882	1,745,298	16,830	37,026	16,425	20,601	19.3	21.2	9.4	11.8
1883	1,799,478	17,174	40,809	16,906	23,903	19.1	22.7	9.4	13.3
1884†	1,853,658	15,989	40,408	18,056	22,352	17.3	21.8	9.7	12.1
1885	1,893,697	15,885	42,119	16,646	25,473	16.8	22.2	8.8	13.5
1886	1,933,735	16,665	41,095	18,187	22,908	17.2	21.3	9.4	11.8
1887	1,973,774	17,179	46,226	19,482	26,744	17.4	23.4	9.9	13.5
1888	2,013,812	17,297	48,952	21,764	27,188	17.2	24.3	10.8	18.5
1889	2,053,851	18,317	49,272	20,315	28,957	17.8	24.0	9.9	14.1
1890†	2,093,889	18,664	52,306	21,642	30,664	17.8	25.0	10.3	14.6
1891	2,130,827	19,244	50,812	22,079	28,733	18.1	23.8	10.4	13.5
1892	2,167,765	20,107	46,221	21,729	24,492	18.6	21.3	10.0	11.3
1893	2,204,703	19,197	47,722	21,982	25,740	17.4	21.6	10.0	11.7
1894+	2,241,641	18,220	44,596	20,959	23,637	16.3	19.9	9.3	10.5
1895	2,278,579	18,952	46,273	22,757	23,516	16.6	20.3	10.0	10.3
1896	2,315,517	18,897	46,302	21,983	24,319	16.3	20.0	9.5	10.5

^{*} From April 5 to December 31, 1867. This was the first year of State registration, and the returns are not comparable with later years when the system was fully established. † Census years.

Table 3.—Number of births and deaths exclusive of stillbirths registered in Michigan for the years 1867-96 inclusive; with rates per 1,000 population. Also the number of still-births registered for each year, stillbirth rate per 1,000 population and ratio of stillbirths per thousand births and per thousand deaths.

	Population.	Registra	tion retur	ns, 1867-96.	Rates pe	er 1,000 po	pulation.	Still-	Still-
Years.		Number of births.	Number of deaths.	Number of still- births.	Births.	Deaths.	Still- births.	births per 1,000 births.	births per 1,000 deaths.
1867*	993,902	13,979	4,409	‡ { 21 }				1.5	
1868	1,057,288	24,968	8,189	‡ 52 { 46 }	23.6	7.7		2.1	5.6
1869	1,120,673	26,952	9,016	‡ 141 í 129 {	24.0	8.0	\$\{\ \tag{1}}	5.2	14.3
1870 t	1,184,059	26,589	10,540	‡ 226 (22.5	8.9	‡	2.8	21.4
1871	1,221,552	25,904	9,460	÷} 88 { 268 {	21.2	7.7	‡} :1 2}	3.4	28.3
1872	1,259,045	27,692	13.167	‡ 301 } 204 }	22.0	10.5	‡} .2}	10.9	15.5
1873	1,296,538	34,260	13,984	‡ { 348 274 }	26.4	10.8	‡ { .2 } ‡ { .3 } ‡ { .2 }	10.2	19.6
1874 †	1,334,031	30,687	12,036	464	23.0	90	.3	15.1	38.6
1875	1,384,515	31,329	11,361	629	22.6	8.2	.5	20.1	55.4
1876	1,435,000	33,589	11,930	646	23.4	8.3	.5	19.2	54.2
1877	1 485,484	82,675	12,199	720	22.0	8.2	.5	22.0	59.0
1878	1,535,968	34,369	11,978	793	22.4	7.7	.5	23.1	66.2
1879	1,586,453	33,373	13,658	749	21.0	8.6	.5	22.4	54.8
1880 t	1,636,937	34,585	15,364	738	21.1	94	.5	21.3	48.0
1881	1,691,117	34,058	18,547	691	20.1	11.0	·.4	20.3	37.3
1882	1,745,298	36,234	15,633	792	20.8	9.0	.5	21.9	50.7
1883	1,799,478	39,925	16,022	884	22.2	8.9	.5	22.1	55.2
1884 †	1,853,658	39,489	17,137	919	21.3	9 2	.5	23.8	58.6
1885	1,893,697	41,111	15,638	1,008	21.7	8.3	.5	24.5	64.5
1886	1,933,735	40,186	17,278	909	20.8	8.9	.5	22.6	52.6
1887	1,978,774	45,329	18,585	897	23.0	9.4	.5	19.8	48.3
1888	2,013,812	47,594	20,406	1,358	23.6	10.1	.7	28.5	66.5
1889	2,053,851	48,070	19,113	1,202	23.4	9.8	.6	25.0	62.9
1890 †	2,093,889	50,909	20,245	1,897	24.3	9.7	.7	27.4	69.0
1891	2,130,827	49,722	20,989	1,090	23.3	9.9	.5	21.9	51.9
892	2,167,765	45,207	20,715	1,014	20.9	9.6	.5	22.4	49.0
893	2,204,703	46,703	20,963	1,019	21.2	9.5	.5	21.8	48.6
1894 †	2,241,641	43,594	19,957	1,002	194	8 9	.4	22.5	50.2
1895	2,278,579	45,164	21,648	1,109	19.8	9.5	.5	24.0	48.7
1896	2,315,517	45,048	20,729	1,254	19.5	9.0	.5	27.1	57.0

^{*} From April 5 to December 31, 1867. This was the first year of State registration, and the returns are not comparable with later years when the system was fully established.
† Census years.
‡ For these years two statements are given of the number of stillbirths, the upper figures representing the number returned in births, the lower in deaths. In 1867 stillbirths were not compiled as deaths. Beginning with 1874, stillbirths returned in births and deaths have been compared, duplicates eliminated, and the true number of distinct cases entered in the tables of both births and deaths.

VITAL STATISTICS AND POPULATION, 1807-96.

In Table 2 the course of registration in Michigan may be examined from its commencement in 1867 to the present time. The actual numbers of births, marriages and deaths returned for each year are stated, and also the corresponding rates per 1,000 population. While it should be understood that the absolute rates given in this table, except those for marriages, are far below the truth, it is probable that the returns of births and deaths are defective by about the same amount each year, and hence the variations of the birth rates and death rates shown in this table may be accepted as approximately reliable. To this statement an important exception must, unfortunately, be made in the rates given for the years 1887-91 for births, and also, though probably to a less extent, for deaths. This irregularity arose from fraudulent returns made from the city of Detroit; its nature and the probable amount of sophistication were explained in the Report for 1892.

The birth rates and death rates given in Table 2 for Michigan are not strictly comparable with those of most other states or countries, even apart from the inaccuracy of the returns in this State under the present system of registration, on account of the inclusion of stillbirths. It is the prevailing practice to exclude these from deaths, and generally also from births, since they do not add to the population as the latter nor diminish it as the former. In the Michigan reports stillbirths have been included in all the tables, both of births and deaths, with, as a result, considerable inconvenience in some respects, especially as to the death rates of children under one year and under five years of age. In Table 3 a statement is given of the number of stillbirths recorded for each year of registration, the corresponding stillbirth rates, and the birth rates and death rates with exclusion of stillbirths. It is there seen that stillbirths have constituted about two per cent of all births, and about five per cent of all deaths registered since 1875. Prior to that time the stillbirths returned in both births and deaths were not put together, as at present, so that different numbers were compiled for these two classes of returns. In 1867 also, the first year of registration, stillbirths were not compiled with deaths.

Table 4.—Births, deaths and natural increase in Michigan, with rates per thousand population according to the United States censuses of 1870, 1880 and 1890, and the State censuses of 1874, 1884 and 1894.

	Danula	Ce	nsus retu	rns.	Rates per 1,000 population.			
Years.	Popula- tion.	Births.	Deaths.	Natural increase.	Births.	Deaths.	Natural increase.	
National census of 1870	1,184,059	34,530	11,181	23,349	29.2	9.4	19.8	
State census of 1874	1,334,031		* 14,280			10.7		
National census of 1880	1,636,937	45,843	19,743	26,100	28.0	12.1	15.9	
State census of 1884	1,853,658	58,775	19,979	33,796	29.0	10.7	18.3	
National census of 1890	2,093,889	51,931	25,016	26,915	24.8	11.9	12.9	
State census of 1894	2,241,641	59,889	23,796	36,093	26.7	10.6	16.1	

^{*} For calendar year 1873.

Table 4 enables the results of the various enumerations of births and deaths in Michigan that have been made in connection with the several United States and State censuses to be compared with one another, and with the results of the State registration. While the rates obtained by the census methods are somewhat higher

than those by the annual registration, they are too low to correctly show the facts. All attempts to obtain vital statistics by enumeration after the close of the census year are necessarily imperfect. The new registration law in force August 29, 1897, will give the first reliable statistics of mortality for Michigan, and it is to be hoped that the registration of births in this State will be improved by the next session of the legislature.

BIRTH, MARRIAGE AND DEATH RATES BY COUNTIES, 1896.

Table 5 compares the returns of births, marriages and deaths from each county of the State with the estimated population for the year. The returns of marriages are probably more correct than those of births and deaths, some of the sparsely settled counties of the State making very imperfect returns of the latter. For this reason, direct comparisons of the vital rates of different counties can rarely be made with any satisfactory assurance of reliability.

The average marriage rate for the State was 16.3 persons married per 1,000 population. It will be noticed that this method of statement refers to persons married, not number of marriages, which is evidently one-half of the above rate, or 8.2 marriages per 1,000. Some of the counties having high marriage rates for the year are as follows: Alger, 56.2; Chippewa, 20.3; Crawford, 19.3; Emmet, 19.8; Gladwin, 19.4; Gratiot, 19.0; Lenawee, 19.1; Newaygo, 19.5; Oscoda, 20.5; Shiawassee, 19.8; St. Joseph, 21.3. Low rates are given for the counties of Alpena, 13.3; Clare, 12.5; Huron, 12.8; Iron, 7.0; Keweenaw, 8.2; Leelanau, 12.1; Luce, 13.9; Mason, 12.2; Menominee, 12.2; Midland, 12.1; Missaukee, 11.9; Montmorency, 13.0; Muskegen, 13.0; Ontonagon, 8.5; Presque Isle, 12.9; Roscommon, 8.2.

A much greater range of variation is noticeable in the county birth rates than in the rates for persons married. Some of the counties having high rates for the year, the average being 20.0 per 1,000, are as follows: Alger, 43.9; Dickinson, 39.8; Gogebic, 44.8; Houghton, 38.2; Iron, 35.2; Marquette, 33.0; Menominee, 35.4. Counties with low rates are: Branch, 13.7; Calhoun, 12.9; Eaton, 13.0; Genesee, 13.6; Hillsdale, 11.9; Kalamazoo, 13.6; Lenawee, 11.3; Oakland, 11.3; Ogemaw, 12.2; Ontonagon, 11.1; Roscommon, 13.6; Shiawassee, 12.4; Washtenaw, 13.0.

The old counties of the Lower Peninsula, having a large proportion of their population of native birth, are the ones that show few births.

The average death rate for the year, according to the returns, was 9.5 per 1,000 population. It is probable that this rate should be considerably increased to represent the true number of deaths that occurred, but such a factor of correction would not be uniformly applicable by counties. Some counties have much more perfect returns than others, and so suffer in the estimation of the casual reader, who does not make allowance for imperfect returns in some of those showing an apparently favorable mortality. As returned, the following counties show high rates of death for the year: Alger, 19.2; Dickinson, 13.1; Gogebic, 14.7; Luce, 14.4; Marquette, 14.2; Menominee, 14.1. Counties with very low rates are: Alcona, 6.1; Antrim, 6.8; Arenac, 6.6; Charlevoix, 6.2; Clare, 5.5; Gladwin, 4.0; Gratiot, 6.4; Isabella, 6.9; Kalkaska, 5.8; Lake, 6.3; Livingston, 6.5; Missaukee, 5.8; Newaygo, 6.0; Ogemaw, 3.2; Ontonagon, 6.6; Osceola, 6.8; Presque Isle, 5.5; Roscommon, 5.4; Schoolcraft, 6.4; Shiawassee, 6.6.

Owing to the irregularities in the returns of births and deaths from the different counties, not very much reliance can be placed upon the rates of natural increase or the excess of births over deaths per 1,000 population. The general indications, a high rate in the counties of the Upper Peninsula and in those containing the larger cities, with low rates for the agricultural communities of the southern part of the State, may be observed.

Table 5.—Number of marriages, births, deaths and excess of births over deaths registered in Michigan for the year 1896, by counties, with rates per 1,000 estimated population. (Stillbirths included in both births and deaths.)

	Esti- mated popula-	Number of mar-	Number	Number	Excess	Rates	per 1,000 ;	populatio	n, 1896.
State and counties.	tion of Michi- gan, June, 1896.*	riages regis- tered, 1896.	of births regis- tered, 1896.	of deaths regis- tered, 1896.	of births over deaths, 1596.	Persons married.	Births.	Deaths.	Natural increase.
State	2,315,517	18,897	46,302	21,983	24,319	16.3	20.0	9.5	10.5
AlconaAlgerAlleganAlpenaAntrim.	5,423	42	95	. 83	62	15.5	17.5	6.1	· 11.4
	1,459	41	64	28	36	56.2	43.9	19.2	24.7
	39,308	330	717	378	339	16.8	18.2	9.6	8.6
	18,785	125	452	156	296	13.3	24.1	8.3	15.8
	13,484	106	243	91	152	15.8	18.1	6.8	11.3
Arenac	7,573	63	192	50	142	16.6	25.4	6.6	18.8
	4,830	38	96	40	56	15.7	19.9	8.3	11.6
	23,657	229	377	183	194	19.4	15.9	7.7	8.2
	63,750	479	1,404	585	869	15.0	22.0	8.4	13.6
	9,476	89	230	78	152	18.8	24.3	8.2	16.0
Berrien	47,810	435	695	387	308	18.2	14.5	8.1	6.4
	25,913	238	355	248	107	18.4	13.7	9.6	4.1
	49,458	403	638	411	227	16.3	12.9	8.3	4.6
	21,288	196	312	185	127	18.4	14.7	8.7	6.0
	11,702	100	181	72	109	17.1	15.5	6.2	9.3
Cheboygan	14,857	112	377	118	259	15.1	25.4	7.9	17.4
Chippewa	16,974	172	414	200	214	20.3	24.4	11.8	12.6
Clare	8,185	51	155	45	110	12.5	18.9	5.5	13.4
Clinton	26,139	229	379	232	147	17.5	14.5	8.9	5.6
Crawford	2,584	25	59	22	37	19.3	22.8	8.5	14.8
Delta	21,228	154	525	187	338	14.5	24.7	8.8	15.9
Dickinson	15,074	130	600	197	403	17.2	39.8	13.1	26.7
Eaton	32,880	305	429	246	183	18.6	13.0	7.5	5.6
Emmet	11,825	117	199	116	83	19.8	16.8	9.8	7.0
Genesee	41,115	357	561	489	72	17.4	13.6	11.9	1.8
Gladwin	5,246	51	99	21	78	19.4	18.9	4.0	14.9
Gogebic	14,542	138	651	214	437	18.3	44.8	14.7	30.1
G'd Traverse	19,595	144	283	139	144	14.7	14.4	7.1	7.3
Gratiot	28,830	274	435	185	250	19.0	15.1	6.4	8.7
Hillsdale	30,078	256	359	285	74	17.0	11.9	9.5	2.5
Houghton	48,568	432	1,857	476	1,381	17.8	38.2	9.8	28.4
Huron	34,112	218	726	259	467	12.8	21.3	7.6	13.7
Ingham	40,701	335	585	380	205	16.5	14.4	9.3	5.0
Ionia	35,830	311	506	307	199	17.4	14.1	8.6	5.6
Iosco	10,898	77	249	98	151	14.1	. 22.8	9.0	13.9
IronIsabellaJacksonKalamazooKalkaska	5,427	19	191	64	127	7.0	35.2	11.8	23.4
	22,767	163	462	156	306	14.3	20.3	6.9	13.4
	47,2 97	447	669	496	173	18.9	14.1	10.5	8.7
	43,448	406	591	414	177	18.7	13.6	9.5	4.1
	5,880	52	99	84	65	17.7	16.8	5.8	11.1
Kent	127,946	1,049	2,491	1,181	1,310	16.4	19.5	9.2	10.2
Keweenaw	2,693	11	77	27	50	8.2	28.6	10.0	18.6
Lake	5,593	40	118	35	83	14.3	21.1	6.3	14.8
Lapeer	28,712	246	469	205	264	17.1	16.3	· · 7.1	9.2
Leelanau	10,281	62	271	90	181	12.1	26.4	8.8	17.6
Lenawee	48,588	464	551	422	129	19.1	11.3	8.7	2.7
Livingston	20,227	182	264	132	132	18.0	13.1	6.5	6.5
Luce	2,294	16	56	33	23	13.9	24.4	14.4	10.0
Mackinac	6,941	58	175	69	106	16.7	25.2	9.9	15.3
Macomb Manistee Marquette Mason	32,674	243	634	317	317	14.9	19.4	9.7	9.7
	27,056	192	804	312	492	14.2	29.7	11.5	18.2
	38,972	306	1,287	553	734	15.7	33.0	14.2	18.8
	19,440	119	475	158	317	12.2	24.4	8.1	16.3

^{*} For foot-note see next page.

Table 5.—CONCLUDED.—Returns and rates per 1,000 population, 1896.

	Esti- mated popula-	Number of mar-	Number of births	Number	Excess of births		per 1,000	populatio	n, 1896.
Counties.	tion of Michi- gan, June, 1896.*	riages regis- tered, 1896.	regis- tered, 1896.	regis- tered, 1896.	over deaths, 1896.	Persons married.	Births.	Deaths.	Natural increase.
Mecosta	21,245	161	381	154	227	15.2	17.9	7.2	10.7
Menominee	24,345	148	. 863	343	520	12.2	35.4	14.1	21.4
Midland	14,499	88	267	108	159	12.1	18.4	7.4	11.0
Missaukee	7,909	47	198	46	152	11.9	25.0	5.8	19.2
Monroe	33,603	302	712	333	379	18.0	21.2	9.9	11.3
Montcalm	34,919	261	581	292	289	14.9	16.6	8.4	8.8
Montmorency.	2,914	19	59	31	28	13.0	20.2	10.6	9.6
Muskegon	35,980	234	717	361	356	13.0	19.9	10.0	9.9
Newaygo	18,449	180	297	111	186	19.5	16.1	6.0	10.1
Oakland	43,392	319	489	370	119	14.7	11.3	8.5	2.7
Oceana	17.050	160	362	135	227	18.8	21.2	7.9	13.3
Ogemaw	5,666	42	69	18	51	14.8	12.2	3.2	9.0
Ontonagon	8,432	36	94	56	38	8.5	11.1	6.6	4.5
Osceola	17,398	128	373	118	255	14.7	21.4	6.8	14.7
Oscoda	1,757	18	34	17	17	20,5	19.4	9.7	9.7
Otsego	5,055	40	112	39	73	15.8	22.2	7.7	14.4
Ottawa	40,946	305	902	821	581	14.9	22.0	7.8	14.2.
Presque Isle	6,523	42	178	36	137	12.9	26.5	5.5	21.0
Roscommon	1,469	6	20	l š	12	8.2	13.6	5.4	8.2
Saginaw	81,634	649	1,712	957	755	15.9	21.0	11.7	9.2
Sanilac	34,623	249	759	259	500	14.4	21.9	7.5	14.4
Schooleraft	7.782	55	184	50	134	14.1	23.6	6.4	17.2
Shia wassee	33,805	334	418	224	194	19.8	12.4	6.6	5.7
St. Clair	55,429	471	925	441	484	17.0	16.7	8.0	8.7
St. Joseph	24,953	266	358	250	108	21.3	14.3	10.0	4.3
Tuscola	35,364	804	619	257	362	17.2	17.5	7.3	10.2
Van Buren	31,318	288	449	307	142	18.4	14.3	9.8	4.5
Washtenaw	44,159	324	572	421	151	14.7	13.0	9.5	3.4
Wayne	310,135	2,413	3,119	4.014	4.105	15.6	26.2	12.9	13.2
Wexford	15,432	136	301	117	184	17.6	19.5	7.6	11.9
		1	1			1	1	1	1

^{*} Estimated by average annual increase as shown by State census of 1894 over U. S. census of 1890. Changes of territory have been allowed for as far as possible. See note on p. 11, preceding report.

Table 6.—Comparing, by counties, the total number of marriages, births and deaths registered in Michigan for the years 1895–96; showing also the increase (or decrease) of the number registered for 1896 as compared with that of the preceding year. (Still-births included in births and deaths.)

Alcona Alger Alger Alger Alger Algera Algena Alpena Antrim Arenac Baraga Barry Bay Benzie Berrien Branch Calhoun Cass Charlevoix Cheboygan Chippewa Clare Clinton Crawford Delta Dickinson Eaton Emmet Genesee Gladwin Gogebic G'd Traverse Gratiot Hulron Huron Huron Hugham Lonia Losso		Marriages			Births.			Deaths.	
	Number in 1896.	Number in 1895.	Increase or de- crease.*	Number in 1896.	Number in 1895.	Increase or de- crease.*	Number in 1896.	Number in 1896.	Increase or de- crease.*
State	18,897	18,952	55	46,802	46,273	29	21,983	22,757	-774
AlconaAlgerAlleganAlpenaAntrim	42 41 390 125 106	46 16 367 144 110	4 25 37 19 4	95 64 717 452 243	95 53 756 469 294	11 - 39 17 51	33 28 378 156 91	39 27 375 174 96	-6 1 3 -18 -5
ArenacBaragaBarryBayBay	63 38 229 479 89	61 35 228 440 71	2 · 3 1 39 18	192 96 377 1,404 230	172 108 311 1,590 163	20 12 66 186 67	50 40 183 585 78	65 61 196 554 57	-15 -21 -13 -19 21
BerrienBranchCalhounCassCharlevoix	435 238 403 196 100	460 239 426 220 87	-25 -1 -23 -24 13	695 355 638 312 181	642 398 698 313 205	53 43 60 1 24	387 248 411 185 72	399 331 463 179 80	12 83 52 6 8
Cheboygan Chippewa Clare Clinton Crawford	112 172 51 229 25	117 162 66 211 29	-5 10 -15 18 -4	877 414 155 379 59	369 391 169 418 52	8 23 —14 —39 7	118 200 45 232 22	142 147 64 239 20	-24 53 -19 -7 2
Delta Dickinson Eaton Emmet Genesee	154 130 305 117 857	144 102 305 118 361	10 28 -1 -4	525 600 429 199 561	517 759 436 213 600	8 -159 -7 -14 -39	187 197 246 116 489	127 178 309 111 424	60 19 63 5 65
Gladwin Gogebic G'd Traverse Gratiot Hillsdale	51 188 144 274 256	51 124 169 263 273	9 25 11 17	99 651 283 435 359	115 581 343 476 376	-16 70 -60 -41 -17	21 214 139 185 285	39 206 219 250 308	18 8 80 65 23
Houghton Huron Ingham Ionia	432 218 335 311 77	395 247 389 344 83	37 29 54 33 6	1,857 726 585 506 249	1,733 856 571 448 258	124 130 14 58 9	476 259 380 307 98	485 269 381 332 102	-9 -10 -1 -25 -4
Iron Isabella Jackson Kalamazoo Kalkaska	19 163 447 406 52	25 223 385 406 46	-6 -60 62 -6	191 462 669 591	150 437 755 711 118	41 25 86 120 19	64 156 496 414 34	35 159 563 469 62	29 3 67 55 28
Kent Keweenaw Lake Lapeer Leelanau	1,049 11 40 246 62	1,090 10 42 262 74	-41 1 -2 -16 -12	2,491 77 118 469 271	2,409 75 145 413 253	82 2 -27 56 18	1,181 27 35 205 90	1,420 27 45 252 84	-239 -10 -47 6
Lenawee Livingston Luce Mackinac Macomb	464 182 16 58 243	427 178 23 64 219	37 4 -7 -6 24	551 264 56 175 634	627 296 73 101 630	-76 -32 -17 74 4	422 132 33 69 317	470 176 13 36 345	-48 -44 20 33 -28
Manistee	192	198	-6 -2	804	802	2	312	230	82
Manitou Marquette Mason Mecosta	306 119 161	270 149 173	-z 36 -30 -12	1,287 475 381	1,102 472 375	185 3 6	553 158 154	437 141 187	116 17 —33

^{*} In many cases, which are indicated by the minus sign (—), a decrease is shown for 1896, as compared with the preceding year.

Table 6.—CONCLUDED.—Returns for 1895 and 1896 compared.

	1	Marriages	.		Births.			Deaths.	
Counties.	Number in 1896.	Number in 1895.	Increase or de- crease.*	Number in 1896.	Number in 1895.	Increase or de- crease.*	Number in 1896.	Number in 1896.	Increase or de- crease.*
Menominee Midland Missaukee Monroe Montealm	148	187	11	863	850	13	843	305	38
	88	101	-13	267	276	-9	108	93	15
	47	72	-25	198	208	-10	46	52	- 6
	302	290	12	712	692	20	383	275	58
	261	269	-8	581	613	-32	292	315	- 23
Montmorency. Muskegon Newaygo Oakland Oceana	19	25	-6	59	63	-4	81	26	5
	234	238	-4	717	715	2	861	846	15
	180	151	29	297	307	-10	111	130	—19
	319	295	24	489	536	-47	870	409	—39
	160	191	-31	362	327	35	135	137	—2
Ogemaw Ontonagon† Osceola Oscoda Otsego	42 36 128 18 40	38 43 186 12 59	4 7 8 6 19	69 94 373 34 112	27 357 33 134	42 94 16 1 —22	18 56 118 17 39	20 140 20 46	-2 56 -22 -3 -7
Ottawa	305	283	22	902	893	9	321	871	50
Presque Isle	42	34	8	173	182	9	36	50	14
Roscommon	6	11	—5	20	2	18	8	3	5
Saginaw	649	613	36	1,712	1,755	43	957	954	8
Sanilac	249	238	11	759	748	16	259	323	64
Schoolcraft	55	71	-16	184	180	4	50	35	15
Shiawassee	334	853	-19	418	469	51	224	246	22
St. Clair	471	470	1	925	941	16	441	466	25
St. Joseph	266	243	23	358	347	11	250	281	31
Tuscola	304	288	16	619	622	3	257	343	86
Van Buren	288	266	22	449	429	20	307	318	-11
Washtenaw	824	320	4	572	641	—69	421	465	-44
Wayne	2,413	2,397	16	8,119	7,754	365	4,014	3,883	129
Wexford	136	139	—3	801	285	16	117	106	11

^{*} In many cases, which are indicated by the minus sign (—), a decrease is shown for 1896, as compared with the preceding year.
† The returns of births and deaths for Ontonagon county, 1895, were burned at the county seat.

VARIATIONS IN RETURNS, BY COUNTIES, FROM 1895 TO 1896.

Table 6, introduced for the first time in the Report for 1892, is regarded as a. very important one, not only for the general interest of its contents, but because it calls direct attention to any marked variation in the returns of any class of statistics from individual counties, and thus precludes the imposition of fraudulent returns to a large amount from any county without detection, as was the case with the fraudulent returns from Wavne county for the years 1887-91.

There is a decrease in the number of marriages returned for 1896 of 55 as compared with the preceding year. Of the 83* counties in the State, 37 show an increased number of marriages, 43 a decreased number, and three counties, Eaton, Gladwin and Kalamazoo report exactly the same number for each year. The greatest gains are shown in the counties of Bay, 39; Houghton, 37; Jackson, 62; Lenawee, 37; Marquette, 36; Saginaw, 36. Counties showing the largest losses are Allegan, 37; Ingham, 54; Ionia, 33; Isabella, 60; Kent, 41; Mason, 30; Oceana, 31.

In births an increase of 29 is shown over the preceding year. Out of the 83 counties reporting 41 showed gains and 41 losses for the year as compared with 1895, and one county, Alcona, reports exactly the same number for each year. Counties showing large gains are Gogebic, 70; Houghton, 124; Kent, 82; Mackinac, 74; Marquette, 185; *Ontonagon, 94; Wayne, 365. Large decreases appear in Bay, 186; Dickinson, 159; Huron, 130; Jackson, 86; Kalamazoo, 120; Lenawee, 76; Washtenaw, 69.

The largest amount of decrease was in the returns of deaths, which were 774 lessthan in 1895. Out of the 83 counties reporting 29 had more deaths in 1896 than in 1895; 53 had fewer deaths in 1896 than in 1895, and one county, Keweenaw, had exactly the same number in each year. Counties showing large increases were as follows: Chippewa, 53; Delta, 60; Genesee, 65; Manistee, 82; Marquette, 116; Ontonagon, 56†; Wayne, 131. Counties showing many deaths less in 1896 than in 1895 were: Branch, 83; Calhoun, 52; Eaton, 63; Grand Traverse, 80; Gratiot, 65; Jackson, 67; Kalamazoo, 55; Kent. 239; Ottawa, 50; Sanilac, 64; Tuscola, 86.

^{*} Excluding Manitou county which was disorganized after making returns for first quarter. † The returns from Ontonagon county for the year 1896 were burned at the county seat.

PART II.—BIRTHS IN MICHIGAN DURING THE YEAR 1896.

The total number of births returned for the year 1896 was only 29 more than the number for the preceding year; consequently, with the assumed increase of population of the State, there was a decline in the birth rate from 20.3 per 1,000 population in 1895 to 20.0 in 1896. The latter rate is the lowest on record in the State with the exception of the year 1894, when the rate fell to 19.9.

The so-called registration of births in Michigan is now the only part of our State registration system in which a fatally defective method of collecting the statistics is employed. It is not a true registration of births at the time of their occurrence, but depends upon the efforts of the supervisors to make a correct enumeration in the spring of each year for the preceding calendar year. As from three to fifteen months may elapse from the occurrence of a birth until the supervisor places it upon record, and as during this time the family may have removed, relatives have died, or other events occurred that utterly preclude a correct registration, it is evident that many births that have actually occurred in the State are omitted in the annual enumeration. It is probable that the returns of births are slightly more correct than those of deaths were under the old law. There is not enough difference, however, to warrant us in placing any stress on the deductions obtained from the compilation of births, except in so far as for some special purposes representative statistics may be assumed to possess the same value that exhaustive statistics would possess. So far as the determination of the birth rate, the natural increase of population, and other important data dependent upon fairly reliable registration is concerned, the Michigan statistics of births are of very little value. For this reason the discussion of births in this and subsequent Reports will be as brief as possible until such time as the subject shall have been placed upon a more satisfactory basis by the enactment of an improved registration law for births.

The birth rates for individual counties are presented and discussed in Part I in connection with the returns of marriages and deaths (Table 5). In Table 6 comparisons are given for each county of the numbers returned for 1895 and 1896 of all classes of returns, and thus any marked increase or decrease may be readily noted. Reference should accordingly be made to these tables and the accompanying text for further information under these heads.

SUMMARY OF THE REGISTRATION OF BIRTHS FOR THE YEAR 1896.

SUMMARY OF THE REGISTRATION OF BIRTHS FOR THE YEAR 1896.
The following statements include the more important features of the registration of births in Michigan for the year 1896:
Total number of births returned,
Exclusive of stillbirths, there were:
Children born alive,
Compared with the previous year, we have:
Increase of births returned for 1896 (46,802) from the number returned for 1895 (46,278)
The following is the distribution of births returned according to sex:
Males, 23,869 Females, .
Males born per 100 births of females, 107
The parent-nativity of children born in 1896, exclusive of births to parents of different nativities, may be stated:
Born of parents both of native birth, 19,892
Born of parents both of foreign birth,
Nationality or country of birth is more definite than general nativity. Following are certain nationalities most numerously represented as parents of children in Michigan:
Nationality or country of birth is more definite than general nativity. Following are certain nationalities most numerously represented as parents of children in
Nationality or country of birth is more definite than general nativity. Following are certain nationalities most numerously represented as parents of children in Michigan: Parents both Canadians,
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Nationality or country of birth is more definite than general nativity. Following are certain nationalities most numerously represented as parents of children in Michigan: Parents both Canadians,
Nationality or country of birth is more definite than general nativity. Following are certain nationalities most numerously represented as parents of children in Michigan: Parents both Canadians,

Synopsis of tables relating to births.

Table.	Births in Michigan, 1896.
	A.—General discussion of births.
7.	Births, by months, for each of the years 1887-96, with average for the ten-year period.
8.	Births, by sex and months, in each county of the State in 1896, also number of births of males to 100 births of females for each county. With Note on color of children born in Michigan, 1896.
9.	By parent nativity and sex, the number and per cent of children born in Michigan, 1896.
10.	Parent nativity of children born in Michigan during the years 1887-96, with average for the ten-year period.
11.	Comparison of parent nativity of children born in Michigan during the years 1895-96, with averages for five quinquennial periods.
12.	Births, by parent nativity and sex, for each county of the State in 1896.
13.	Nationality of parents of children born in Michigan during the year 1896.
14.	Comparison of the number of children born in Michigan in 1896 of parents of given nationality with the number of marriages registered of corresponding nationality. Alsoratios for 1894-95.
15.	Ratios of parents of children, by nationality, to corresponding population of Michigan, 1894-96.
16.	Nationality of parents of children by countles, 1896.
	B.—Stillbirths, plural and illegitimate births.
17.	Number of stillbirths, pairs of twins and illegitimate children born in each county of the State in 1896.
18.	Ratios of stillborn, twin and illegitimate children to total births for ten years, 1887-96. Statement of triplets.
19.	Months of birth, by sex, of stillborn, twin and illegitimate children, 1896.
20.	Parent nativity, by sex, of stillborn, twin and illegitimate children, 1896.
21.	Ratios of the sexes (number of males to 100 females) of children born alive, stillbirths, twins and illegitimates for ten years, 1887-96.
22.	Comparison of the parent nativity of plural births in Michigan for ten years, 1887-96.
23.	Comparison of the parent nativities of the mothers of illegitimate children born in Michigan for ten years, 1887-96.
24.	List of townships reporting that no births occurred in 1896.
25.	List of townships that failed to make returns of births for 1896.

BIRTHS RETURNED BY MONTHS, 1887-96.

Table 7 shows the number of births returned for each month of the year 1896, and enables comparisons to be made with each of the previous years since 1887, and also with the average for the ten-year period, 1887-96. In 1896 the largest number of births occurred in August, the smallest number in February, thus agreeing with the average for the decennial period. The returns for the different months do not at all represent the true relations of the births that actually occurred in those periods of time. It is well known that by the present system of registration in this State a large number of births entirely fail of record each year. The largest amount of deficiency in this respect is found among the first months of the year, these months being most remote from the date of registration. The returns for December and the latter months of the year are much more perfect, though even with these at least four months elapse between the occurrence of the births and the time of recording them. For this reason it will be observed that if the same number of births actually occurred in each month of the year, the order of the months, as returned, would be in the reverse order of their procession in the year.

That the latter months of the year predominate in the years compared and also in the ten-year average, does not appear especially significant in view of the large margin of error involved in the data presented.

Table 7.—Births returned, by months, for the years 1887-96 inclusive; with average for the ten-year period. (Stillbirths included.)

	Total							Mon	ths.					
Years.	for year.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1887	46,226	3,132	3,150	3,987	3,896	3,960	3,666	4,011	4,266	4,831	3,944	3,765	4,058	60
1888	48,952	3,531	3,516	4,099	3,953	4,214	4,133	4,223	4,514	4,415	4,305	3,811	4,193	45
.1889	49,272	3,340	3,10 4	4,001	4,057	4,238	4,050	4,252	4,526	4,382	4,292	4,331	4,646	58
1890	52,306	4,130	3,718	4,356	4,407	4,568	4,313	4,397	4,651	4,517	4,219	4,223	4,765	42
1891	50,812	3,629	3,534	4,345	4,238	4,465	4,078	4,293	4,702	4,646	4,340	4,098	4,391	58
1892	46,221	3,226	3,315	3,745	3,928	3,977	3,681	3,929	4,168	4,088	3,918	3,853	4,344	49
1893	47,722	3,346	3,391	4,069	3,934	3,924	3,901	4,158	4,351	4,246	4,165	3,916	4,263	58
1894	44,596	2,889	3,020	3,854	3,896	3,866	3,735	3,917	3,981	3,778	3,750	3,684	4,204	22
1895	46,273	3,204	3,240	3,827	3,742	4,022	8,745	3,989	4,346	4,214	3,997	3,750	4,159	38
1896	46,302	3,322	3,184	3,781	3,862	3,918	3,697	3,879	4,405	4,208	3,994	3,842	4,155	55
A more de														
Average, 1887-96	47,868	3,375	3,317	4,006	3,991	4,115	3,900	4,105	4,391	4,283	4,092	3,927	4,318	48

Maxima in bold-faced type; minima in italics.

BIRTHS BY COUNTIES MONTHS AND SEX, 1896.

Table 8 gives a detailed statement of the number of births, by sex and moths, for each county of the State. In this table is also incorporated a statement of the ratio of male births to 100 female births in each county, and a NOTE appended to the table gives a full statement by counties, of the number and sex of all births of color other than white. Only 247 such were reported against a total of 46,055 white children born.

Table 8.—Exhibiting, by counties and by sex, the number of births returned for the year, and for each month of the year 1896; also the number of males to 100 females. With note on color of children born. (Stillbirths included.)

State and counties.	Births-males to 100 females.	Sex.	Year, 1896.	Months, 1896.												
				January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
State	107	Total Males Females Unknown	46,302 23,869 22,360 73	3322 1735 1583 4	1516	3781 1906 1868 7	3862 1946 1912 4	3918 1986 1929 3	1761	1845	2142	2045	3994 2026 1963 5	3842 2003 1834 5	4155 2208 1941 6	56 24 21 10
Alcona	90	Total Males Females	95 45 50	7 4 3	6 2 4	5	10 5 5	12 7 5	7 5 2		4 1 3	6	5	11 5 6	8 1 7	
Alger	73	Total Males Females	64 27 37	3 1 2	5 2 3	8 5 3		2 2	9 4 5	6 1 5	4 2 2	16 5 11	3 1 2	6 2 4	2	
Allegan	121	Total Males Females Unknown	717 392 323 2	45 28 17	58 32 26	63 34 29	58 32 26	60 31 29	63 39 24	32	65 31 34	64 38 26	72 37 35	57 32 23 2	55 25 30	1
Alpena	123	Total Males Females	452 249 203	36 18 18	52 34 18	40 19 21	40 24 16	48 25 23	28 14 14	33 21 12	46 22 24	41 22 19	38 21 17	26 13 13	24 16 8	
Antrim	111	Males Females	243 128 115	12 5 7	14 6 8	26 14 12	20 7 13	21 14 7	25 15 10	26 11 15	22 8 14	22 13 9	21 13 8	19 12 7	15	
Arenac	102	Males Females	192 97 95	21 11 10	16 8 8	19 12 7	16 10 6	22 10 12	13 7 6	8 3 5	31 18 13		12 5 7	8 5 3	8 4 4	
Baraga	104	Total Males Females	96 49 47	10 5 5	11 3 8	12 8 4	14 9 5	972	5 1 4	12 6 6	2	1	7 4 3	4 2 2	633	
Barry	130	Males Females	377 213 164	32 20 12	24 13 11	20 7 13	30 17 13	40 25 15	36 18 18	31 17 14	43 29 14	38 21 17	27 14 13	34 21 13	21 11 10	
Bay	106	Total Males Females Unknown	1,404 721 682 1	116 50 66	111 61 50	113 60 53	113 49 64	105 51 54	107 63 44	96 46 50	146 86 59	129 62 67	119 63 56	125 71 54	123 59 64	1
Benzie	92	Males Females	230 110 120	21 10 11	11 5 6	19 4 15	24 13 11	16 10 6	21 11 10	22 10 12	26 10 16	16 5 11	21 12 9	14 7 7	19 13 6	
Berrien	101	Total Males Females Unknown	695 343 341 11	45 20 25	41 19 22	55 29 26	62 33 29	58 26 32	56 25 28 3	64 33 29 2	73 32 41	53 25 28	58 30 28	57 30 27	65 39 25 1	
Branch	76	Males Females	355 159 202	33 12 21	14 8 6	22 10 12	32 14 18	35 11 24	33 18 15	29 13 16	41 16 25	33 18 15	24 7 17	26 13 13	33 13 20	
Calhoun	100	Total Males Females Unknown	638 317 317 4	57 29 28	42 24 18	46 17 27 2	57 26 31	52 25 26 1	39 15 24	54 26 28	59 32 27	55 27 28	68 29 38 1	52 29 23	57 38 19	
Cass	100	Total Males Females	312 156 156	11 8 3	15 6 9	24 17 7	26 12 14	26 8 18	30 10 20		35 21 14	18 8 10	40 19 21	28 17 11	30 15 15	C.,
Charlevoix	103	Males Females	181 92 89	8 5 3	10 8 2	14 5 9	15 7 8	27 14 13	10 6 4	20 9 11	19 7 12	11 5 6	21 10 11	17 11 6	9 5 4	:::

Table 8.—Continued.—Births by counties, months and sex.

	3								Mon	ths,	1896.					
Counties.	Births—males 100 females.	Sex.	Year, 1896.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Cheboygan	105	Total Males Females	377 193 184	33 15 18	23 14 9	34 21 13	40 22 18	30 16 14	28 13 15	44 15 29	29 18 11	34 19 15	26 13 13	27 13 14	29 14 15	
Chippe wa	119	Total	414 225 189	28 18 10	36 13 23	29 18 11	22 12 10	34 19 15	38 28 10	39 16 23	41 21 20	33 16 17	35 18 17	35 20 15	41 25 16	3 1 2
Clare	87	Total Males Females	155 72 83	4 1 3	₆	8 5 3	21 8 13	18 6 12	12 9 3	14 8 6	16 8 8	24 15 9	11 4 7	14 5 9	7 3 4	
Clinton	124	Total Males Females Unknown	379 208 168 3	20 10 9 1	29 19 8 2	28 15 13	27 11 16	29 16 13	37 17 20	38 27 11	37 22 15	42 21 21	35 20 15	30 14 16	27 16 11	
Crawford	136	Total Males Females	59 34 25	4 4 	3 2 1	6 5 1	6 3 3	3 2 1	6 5 1	4 2 2	7 5 2	4 1 3	4 1 3	8 3 5	3 1 2	<u>1</u>
Delta	110	Total Males Females	525 275 250	47 20 27	33 14 19	55 28 27	44 21 23	53 30 23	27 17 10	41 27 14	40 22 18	47 24 23	35 15 20	40 21 19	62 35 27) L
Dickinson	103	Total Males Females	600 304 296	37 22 15	38 23 15	48 24 24	59 29 30	50 22 28	51 22 29	53 23 30	49 24 25	54 29 25	47 22 25	42 23 19	72 41 31	
Eaton	99	Total Males Females Unknown	429 213 215 1	34 16 18	81 15 16	42 22 20	37 15 22	33 18 15	35 17 18	34 21 13	37 12 25	32 17 15	37 17 20	48 26 22	29 17 11 1	
Emmet	97	Total Males Females	199 98 101	12 6 6	14 6 8	15 7 8	20 11 9	18 8 10	22 13 9	23 12 11	20 13 7	14 4 10	13 3 10	9 5 4	19 10 9	
Genesee	102	Total Males Females Unknown	561 283 277 1	33 17 16	35 19 16	51 28 23	35 25 10	42 23 19	50 20 30	61 24 37	58 25 33	58 27 31	44 27 17	44 24 19 1	50 24 26	
Gladwin	120	Total Males Females	99 54 45	8 7 1	6 2 4	6 3 3	8 7 1	11 4 7	9 5 4	10 5 5	15 6 9	10 7 3	6 3 3	3 2 1	6 2 4	t 1
Gogebic	103	Total Males Females	651 331 320	61 28 33	46 25 21	59 27 32	55 26 29	58 31 27	45 29 16	42 21 21	58 30 28	51 29 22	53 27 26	65 29 36	58 29 29	
Grand Traverse	136	Total Males Females	283 163 120	15 12 3	10 6 4	24 9 15	37 21 16	29 15 14	29- 15 14	28 19 9	30 16 14	20 10 10	24 17 7	17 10 7	20 13 7	
Gratiot	120	Total Males Females	435 237 198	29 14 15	19 11 8	35 12 23	28 15 13	33 19 14	39 23 16	43 30 13	43 28 · 15	39 20 19	48 31 17	35 15 20	43 18 25	1: 1
Hillsdale	89	Total Males Females Unknown	359 168 189 2	34 17 17	21 8 13	35 17 18	28 14 13 1	18 8 10	25 10 15	30 14 16	41 22 19	30 9 20 1	28 14 14	31 17 14	38 18 20	
Houghton	111	Total Males Females	1,857 976 881	131 72 59	143 72 71	171 92 79	156 80 76	161 84 77	137 79 58	142 76 66	148 78 70	160 90 70	163 80 83	154 72 82	191 101 90	
Huron	103	Total Males Females	726 368 358	47 24 23	40 23 17	73 34 39	60 25 35	59 37 22	67 27 40	64 39 25	81 44 37	81 34 47	48 26 22	51 28 23	55 27 28	

Table 8.—CONTINUED.—Births by counties, months and sex.

	to							- 1	Mon	ths,	1896.					
conia	Births—males 100 females.	Sex.	Year, 1896.	January.	February.	March.	A prfl.	May.	June,	July.	August.	September.	October.	November.	December.	Unknown.
Ingham	118	Total Males Females Unknown	585 315 268 2	30 19 11	38 19 18 1	48 24 24	52 24 27 1	51 34 17	50 22 28	43 18 25	71 33 38	42 27 15	42 - 25 17	63 34 29	55 36 19	
Ionia	100	Total Males Females	506 253 253	33 13 20	40 23 17	34 19 15	52 20 32	39 16 23	44 25 19	38 23 15	38 21 17	57 34 23	47 22 25	52 21 31	32 16 16	
osco	149	Total Males Females	249 149 100	13 7 8	16 11 5	23 10 13	22 12 10	18 10 8	16 9 7	21 18 3	30 18 12	21 13 8	24 16 8	20 13 7	25 12	1
ron	115	Total Males Females	191 102 89	28 11 17	19 13 6	16 7 9	21 12 9	12 6 6	14 8 6	13 11 2	12 5 7	12 7 5	16 9 7	13 5 8	15 8 7	
sabella	93	Males Females	462 222 240	30 13 17	33 12 21	39 21 18	41 21 20	40 15 25	39 18 21	36 20 16	54 26 28	45 26 19	42 17 25	32 17 15	28 16 12	
fackson	111	Total Males Females	669 352 317	53 31 22	47 20 27	40 20 20	58 34 24	50 27 23	50 27 23	50 32 18	60 26 34	67 32 35	62 37 25	56 30 26	75 35 40	
Kalamazoo	110	Males Females	591 310 281	50 27 23	35 21 14	41 26 15	45 26 19	49 22 27	46 28 18	'46 25 21	54 26 28	60 31 29	60 25 35	54 26 28	50 26 24	
Kalkaska,	172	Total Males Females Unknown	99 62 36 1	7 4 3	9 4 4 1	8 6 2	6 4 2	8 4 4	8 7 1	13 7 6	8	7 3 4	10 5 5	8 7 1	7 3 4	
Kent	108	Total Males Females Unknown	2,491 1,289 1,198 4	207 110 97	190 100 89	175 84 91	206 106 100	218 110 108	185 96 89	206 94 110 2	196 103 93	244 135 109	211 109 102	214 121 92 1	239 121 118	
Keweenaw	166	Males Females	77 48 29	. 4	8 4 4	14 7 7	8 6 2	8 6 2	4 2 2	3 2 1	4 2 2	6 3 3	5 2 3	4 3 1	972	
Sake	79	Males Females	118 52 66	7 2 5	13 8 5	9 3 6	11 3 8	15 5 10	8 5 8	11 5 6	11 7 4	6 1 5	10 7 3	₈	8 6 2	
Lapeer	95	Males Females	469 228 241	33 16 17	25 17 8	36 18 18	31 13 18	36 18 18	46 28 18	41 26 15	55 19 36	52 22 30	37 17 20	42 22 20	35 12 23	
Leelanau	128	Total Males Females	271 152 119	16 9 7	13 8 5	25 13 12	23 12 11	24 13 11	18 9 9	31 16 15	22 11 11	25 13 12	22 10 12	20 17 3	32 21 11	1.
Jenawee	118	Total Males Females Unknown	551 297 252 2	41 23 18	35 18 17	40 27 12 1	50 30 19 1	52 28 24	35 17 18	46 23 23	62 28 34	42 26 16	47 25 22	39 16 23	62 36 26	
Livingston	108	Males Females	264 137 127	10 5 5	19 11 8	23 9 14	15 8 7	34 19 15	22 12 10	16 8 8	19 10 9	34 19 15	22 11 11	21 10 11	29 15 14	
Luce	87	Males Females	56 26 30	1 i	3 2 1	5 4 1	4 1 3	3 2 1	6 5 1	6 1 5	7 4 3	8 2 6	4 1 3	3 2 1	6 2 4	1
Mackinae	83	Total Males Females Unknown	175 78 94 3	13 5 8	13 11 2	20 10 10	14 7 7	17 3 13	12 4 8	21 7 12 2	22 8 14	12 8 4	13 7 6	12 5 7	6 3 3	

Table 8.—CONTINUED.—Births by counties, months and sex.

	Ş							1	Mon	ths,	1896.					
Counties.	Births—males 100 females.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Macomb	108	Total Males Females	634 329 305	43 22 21	45 19 26	37 20 17	52 26 26	59 27 32	40 24 16	47 30 17	68 31 37	55 30 25	51 25 26	69 43 26	68 32 36	
Manistee	102	Males Females	804 406 398	60 34 26	50 22 28	74 36 38	72 34 38	66 33 33	70 38 32	58 24 34	78 45 33	68 32 36	74 38 36	69 37 32	65 33 32	
Marquette	103	Total Males Females Unknown	1,287 653 632 2	79 41 38	120 63 57	102 54 47 1	121 63 57 1	117 59 58	104 54 50	116 66 50	115 55 60	102 38 64	98 46 52	110 57 53	103 57 46	::::
Mason	98	Total Males Females Unknown	475 234 240 1	28 11 17	23 13 10	43 22 21	50 25 25	29 12 17	35 14 21	37 16 21	46 23 23	54 22 32	42 22 20	43 24 19	41 26 14 1	4
Mecosta	115	Total Males Females Unknown	381 203 177 1	23 14 9	17 13 4	27 14 13	33 15 18	23 21	36 17 19	46 28 18	36 17 19	28 19 9	31 12 19	27 17 10	33 14 18 1	
Menominee	112	Total Males Females Unknown	863 455 406 2	58 28 30	73 40 33	76 43 33	77 35 42	84 45 39	70 40 30	71 37 33 1	78 38 40	69 38 31	61 31 30	60 30 30	50	
Midland	88	Males	267 125 142	22 13 9	18 12 6	28 16 12	18 10 8	36 15 21	28 7 21	12 2 10	28 16 12	24 10 14	26 11 15	14 6 8	. 7	
Missaukee	104	Males Females	198 101 97	8 6 2	18 10 8	16 10 6	20 11 9	15 7 8	20 5 15	21 9 12	13 5 8	23 15 8	19 7 12	15 8 7	10 8 2	
Monroe	106	Total Males Females Unknown	712 366 345 1	47 26 20 1	55 25 30	61 28 33	63 32 31	60 32 28	46 24 22	60 27 33	66 36 30	67 33 34	68 29 39	50 34 16	69 40 29	
Montcalm	96	Total Males Females Unknown	581 283 296 2	37 18 18 1	33 10 23	44 25 19	40 18 22	52 2 32	66 33 33	47 25 22	65 28 37	48 17 31	59 40 18 1	53 28 25	37 21 16	
Montmorency	103	Males Females	59 30 29	1 	3 1 2	6 4 2	2 1 1	10 7 3	8 3 5	3		10 7 3	3 1 2	6 4 2	2	=
Muskegon	118	Total Males Females Unknown	717 385 325 7	52 23 29	52 30 22	57 31 25 1	65 32 33	56 27 28 1	42 27 15	41	55 29 22 4	71 38 33	63 25 38	56 30 25 1	72 50 22	2
Newaygo	111	Males Females	297 156 141	19 13 6		25 10 15	18 5 13	24 18 6	30 16 14	27 17 10	30 15 15	27 14 13	21 13 8	28 13 15	26 14 12	
Oakland	108	Males Females	489 254 235	100	31 16 15	34 15 19	42 21 21	44 25 19	37 19 18	39"	41 23 18	11 553	38 18 20	51 27 24	41 22 19	
Oceana	102	Males Females	362 183 179	7	29 14 15	17 5 12	29 13 16	35 21 14	35 20 15		100	33 17 16	39 15 24	25 14 11	27 11 16	
Ogemaw	123	Males Females	69 38 31	2 2	5 3 2	14 10 4	11 3 8	2 2	5 8 9	3		7 4 3	i	1	2 2	
Ontonagon	88	Total Males Females Unknown	94 42 48 4	5 3 2	3 1	8 3 4 1	8 3 5	523	9 8		12 8 3 1	2 1 1	9 4 5	11 6 5	14 6 8	

Table 8.—CONCLUDED.—Births by counties, months and sex.

	10								Mon	ths,	1896.					
Oscoda Otsego Otsego Presque Isle Roscommon Saginaw Schoolcraft Shiawassee St. Clair St. Joseph Fuscola	Births-males,	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Osceola	94	Total Males Females	373 181 192	12 4 8	18 9 9	24 13 11	43 16 27	41 16 25	43 23 20	27 12 15	34 18 16	42 24 18	33 16 17	25 13 12	31 17 14	
Oscoda:	162	Total Males Females	34 21 13	1	2 2	2 2	5 2 3	3 1 2	5 1 4	2 2	3	2 2		2 2	5 4 1	
Otsego	107	Total Males Females	112 58 54	6 3 3	3	12 5 7	6 2 4	8	12 7 5	7 1 6	11 7 4	8 4 4	8 4 4	12 7 5	18 10 8	
Ottawa	116	Total Males Females Unknown	902 482 417 3	51 31 20	62 41 21	75 28 47	73 38 35	72 38 34	82 53 29	83 46 37	93 53 40	76 40 36	74 37 37	72 30 42	85 47 38	
Presque Isle	84	Total Males Females	173 79 94	7 3 4	16 4 12	16 8 8	12 7 5	20 11 9	10 6 4	19 11 8	16 5 11	13 6 7	16 9 7	18 6 12	9 3 6	
Roscommon	150	Total Males Females	20 12 8	3 1 2		1	4 3 1	1 1		1	3 2 1	3 1 2	3 2 1			
Saginaw	108	Total Males Females Unknown	1,712 887 820 5	111 69 42	122 63 59	122 56 66	136 71 65	148 65 83	128 60 67 1	140 72 68	163 91 71 1	171 90 81	165 90 74 1	145 78 67	155 79 76	1
Sanilae	109	Total Males Females	759 395 364	42 25 17	46 23 23	66 29 37	72 39 33	52 29 23	64 37 27	75 38 37	84 42 42	80 42 38	63 33 30	59 27 32	56 31 25	
Schoolcraft	102	Total Males Females	184 93 91	11 6 5	13 5 8	22 10 12	12 6 6	10 7 3	16 10 6	20 11 9	14 6 8	16 9 7	15 7 8	10 4 6	24 11 13	1
Shiawassee	97	Total Males Fen ales Unknown	418 205 211 2	30 14 15 1	17 9 8	27 11 16	32 16 16	31 15 16	41 18 22 1	41 23 18	42 16 26	42 24 18	35 16 19	43 23 20	37 - 20 17	
St. Clair	102	Total Males Females Unknown	925 466 456 3	64 30 34	49 23 26	75 40 34 1	65 34 31	66 34 32	80 33 47	81 43 38	107 57 49 1	82 37 45	102 61 40 1	78 37 41	76 37 39	
St. Joseph	93	Total Males Females Unknown	358 172 185	30 14 16	15 4 11	21 10 11	21 11 10	23 10 13	33 18 14 1	39 18 21	34 12 22	35 14 21	26 15 11	38 22 16	43 24 19	
Tuscola	101	Total Males Females	619 311 308	35 17 18	34 22 12	47 25 22	47 26 21	63 30 33	43 20 23	54 26 28	61 29 32	69 40 29	50 23 27	55 24 31	50 25 25	4
Van Buren	96	Total Males Females Unknown	449 220 228 1	16 11 5	27 17 10	37 17 20	44 20 24	45 22 23	41 20 21	33 18 15	44 21 23	36 18 18	45 19 25	34 14 20	47 23 24	
Washtenaw	97	Males	572 281 291	44 18 26	19	37 19 18	51 22 29	48 24 24	46 23 23	45 26 19	67 31 36	59 30 29	44 25 19	40 15 25	50 29 21	
Wayne	109	Total Males Females	8,119 4,239 3,880	375 313	306 277	354	630 325 305	624 320 304	607 321 286	630 336 294	730 385 345	705 363 342	351	702 367 335	790 416 374	
Wexford	111	Males Females Unknown	301 158 142 1		20 9 11	14 8 6	29 19 10	35 18 17	23 11 12	23 10 13	24 13 11	33 21 12	27 17 10	9 12	30 16 13 1	1

NOTE TO TABLE 8.-COLOR OF CHILDREN BORN IN MICHIGAN, 1896.

Out of 46,302 births, the total number reported for the year, 46,055 were white. Only 247 children were given as belonging to other colors or races, of whom 124 were black, 60 mulatto and 63 Indians (including 11 halfbreeds). The proportion of white children is so large, constituting 99.47 per cent of the total births, that any deductions in regard to comparative birth rates in the white and colored population of this State must, necessarily, be of very slight importance and of very doubtful value. Below are given, with specification of sex, the number of births of colors other than white in each county of the State:

BLACK BIRTHS.—Total for State, 124; 58 males, 66 females. By counties—Wayne, 24 males, 26 females; Washtenaw, 2 males, 6 females; Jackson, 3 males, 3 females; Ingham, 5 males, 1 female; Oakland, 2 males, 3 females; Cassa Kent, Van Buren, each 1 male, 3 females; Calhoun, 3 females; Marquette, 1 male, 2 females; Allegan, Branch, each 2 females; Bay, Kalamazoo, Lenawee, Mecosta, each 1 male, 1 female; Genesee, Ionia, Leelanau, Oceana, each 1 male; Antrim, Gratiot, Isabella, Macomb, Midland, each 1 female.

MULATTO BIRTHS.—Total for State, 60; 29 males, 31 females. By counties—Cass, 12 males, 10 females; Wayne, 5 males, 3 females; Washtenaw, 2 males, 2 females; Isabella, Kent, each 1 male, 2 females; Benzie, 2 males, 1 female; Eaton, 3 females; Cheboygan, 2 males; Kalamazoo, 1 male, 1 female; Allegan, Berrien, Mason, each 1 male; Barry, Bay, Chippewa, Ionia, Lenawee, Presque Isle, Van Buren, each 1 female.

INDIAN BIRTHS.—Total for State, 63; 31 males, 32 females. There are included in this number 5 males and 6 females of mingled white and Indian parentage. By counties—(a) Indian: Baraga, 7 males, 8 females; Leelanau, 4 males, 4 females; Calhoun, Isabella, each 2 males, 2 females; Chippewa, 2 males, 1 female; Saginaw, 3 males; Allegan, 2 males; Arenac, Emmet, Missaukee, each 2 females; Oceana, 1 male, 1 female; Mackinac, Mason, St. Clair, each 1 male; Antrim, Van Buren, each 1 female. (b) Halfbreeds: Mackinac, 2 males, 6 females; Baraga, 2 males; Marquette, 1 male.

Table 9.—Showing, by sex, the parent nativity of children born in Michigan, during the year 1896, according to the returns.

			•	Fotal bi	rt hs , 189	6.		
Nativity of parents of children born, 1896.		Nun	aber.		P	er cent	of tota	ı.
	Total.	Males.	Fe- males.	Un- known.	Total.	Males.	Fe- males.	Un- known.
All nativities	46,302	23,869	22,360	73	100.0	100.0	100.0	100,0
Both parents native-born	19,892	10,130	9,730	32	43.0	42.4	43.5	43.8
Both parents foreign-born	16,420	8,500	7,905	15	35.5	35.6	35.4	20.5
Foreign father and native mother	5,455	2,897	2,551	7	11.8	12.1	11.4	9.6
Foreign mother and native father	3,134	1,624	1,508	2	6.8	6.8	6.7	2.7
Unknown mother, father native	116	57	58	1	.3	.2	.3	1.4
Unknown mother, father foreign	112	63	49		.2	.3	.2	
Unknown father, mother native	250	123	123	4	.5	.5	.6	5.5
Unknown father, mother foreign	104	68	36		.2	.3	.2	
Both unknown	819	407	400	12	1.8	1.7	1.8	16.4
One or both native*	28,847	14,831	13,970	46	62.3	62.1	62.5	63.0
One or both foreign*	25,225	13,152	12,049	24	54.5	55.1	53.9	32.9

^{*} Including cases where nativity of either parent is unknown.

Table 10.—Parent nativity of children born in Michigan for each of the years 1887-96, inclusive; with average for the ten-year period.

			Nativi	ty of pa	rents of	childi	ren.—	Per o	cent o	f tota	al.		
	711		******	Danalan	One	Fa	ther-		Мо	ther-		One or	0
Years.	Both native- born.	Both ative-foreign-born. Both native-foreign-born. Both and and ative mother and a second for a	father and native mother.	Foreign mother and native father.	or both un- known.	Native.	Foreign.	Unknown.	Native.	Foreign.	Unknown.	both par- ents native- born.*	One or both parents foreign- born.*
1887	43.0	36.9	10.9	6.5	2.6	49.8	48.1	2.1	54.4	43.6	1.9	61.2	50.4
1888	44.0	36.3	10.5	6.1	3.1	50.3	47.0	2.7	55.0	42.6	2,5	61.2	53.3
1889	41.8	39.0	10.7	6.0	2.6	48.1	49.9	2.1	52.9	45.1	2.0	59.1	56.0
1890	41.8	38.4	10.8	6.0	3.0	48.3	49.5	2.2	53.1	44.6	23	59.6	55.8
1891	40.2	39.8	10.8	6.1	3.1	46.9	51.0	2.1	51.3	46.2	2.5	58.0	57.4
1892	39.7	39.7	10,9	6.3	3.3	46.7	51.0	2.3	51.3	46.2	2.5	58.2	57.5
1893	41.1	38.5	11.0	6.6	2.9	48.0	50.0	2.1	52.6	45.3	2.1	59.5	56.7
1894	43.0	35.6	11.4	6.8	3.3	50.4	47.9	1.7	54.9	42.5	2.6	62.3	54.8
1895	43.4	35.5	11.3	6.8	3.0	50.7	47.0	2.2	55.3	42.5	2.2	62.6	54.1
1896	43.0	35.5	11.8	6.8	3.0	50.0	47.5	2.5	55.3	42,5	2.3	62.3	54.5
Average, 1887-96.	42.1	37.5	11.0	6.4	3.0	48.9	48.9	2.2	53.6	44.1	2.3	60.4	55,1

^{*} Including cases where nativity of either parent is unknown.

Table 11.—Parentage of children, by nativity, born in Michigan during the year 1896, compared with averages for five quinquennial periods.

_	Nat	tivity of pa	rents.—Per	cent of to	tal.
Years and periods averaged.	Both native- born.	Both foreign- born.	Foreign father and native mother.	Native father and foreign mother.	One or both unknown.
Average, 1871-75	44.8	34.8	9.5	5.2	6.2
Average, 1876-80	46.0	34.1	11.0	5.7	8.1
Average, 1881–85	43.7	35.5	11.5	6.2	2.9
Average, 1886-90	42.7	37.6	10.7	6.2	2.8
Average, 1891-95	41.5	37.8	11.1	6.5	3.1
Year 1895	43.4	35.5	11.3	6.8	8.0
Year 1896	43.0	35.5	11.8	6.8	3.0

Table 12.—Exhibiting for the State and counties of Michigan, by sex, the parent nativity of children returned for the year 1896. (Stillbirths included.)

				Nativ	ity of p	arents o	of childs	en borr	in 1896		
State and	Sex of children born,	Chil- dren	Doth	Dath	Foreign		'Mot unkr	her lown.	Fath unkno		ė
counties.	1896.	born, 1896.	Both native- born.	Both foreign- born.	father and native	mother and native	Fatl	ier—	Mothe	er—	know
					mother.	father.	Native.	Foreign.	Native.	For- eign.	Both unknown
State	Total Males Females Unknown	46,302 23,869 22,360 73	19,892 10,130 9,730 32	16,420 8,500 7,905 15	5,455 2,897 2,551 7	3,134 1,624 1,508 2	116 57 58 1	112 63 49	250 123 123 4	104 68 36	819 407 400 12
Alcona	Total Males Females	95 45 50	24 16 8	42 19 23	18 6 12	11 4 7					
Alger	Total Males Females	64 27 37	16 6 10	19 11 8	5 1 4	1 1		5 1 4	1 1		17 7 10
Allegan	Total Males Females Unknown	717 392 323 2	512 281 230 1	68 34 34	80 49 31	35 19 15 1	1		8 2 6		13 7 6
Alpena	Total Males Females	452 249 203	57 38 24	283 156 127	74 42 32	36 17 19		1 1			1 1
Antrim	Total Males Females	243 128 115	122 65 57	55 28 27	31 17 14	· 33 17 16			2 1 1		
Arenac	Total Males Females	192 97 95	72 37 35	62 31 31	39 19 20	18 10 8	1 1				
Baraga	Total Males Females	96 49 47	32 18 14	42 22 20	16 8 8	1 1			5 1 4		
Barry	Total Males Females	377 213 164	335 190 145	15 10 5	14 5 9	8 5 3			2 2	1 1	2 2
Bay	Total Males Females Unknown	1,404 721 682 1	362 184 177 1	617 306 311	251 140 111	127 62 65	1	4	9 8 1	3 2 1	30 15 15
Benzie	Total Males Females	230 110 120	137 61 76	42 21 21	27 16 11	19 10 9			4 1 3		1
Berrien	Total Males Females Unknown	695 343 341 11	456 223 226 7	132 71 60 1	48 19 26 3	27 14 13	5 3 2		8 4 4		19 9 10
Branch	Total Males Females	355 153 202	298 131 167	15 2 13	21 13 8	11 3 8	4 1 3		4 3 1		2 2
Calhoun	Total Males Females Unknown	638 317 317 4	500 241 256 3	62 35 26 1	40 23 17	26 11 15	2 2		4 2 2		4 3 1
Cass	Total Males Females	312 156 156	275 133 142	9 8 1	19 9 10	3 3	2 1 1		1 1		3 1 2

Table 12.—CONTINUED.—Births by counties, parent nativity and sex.

				Nativ	ity of p	arents o	of child	ren bori	in 1896	Ĺ	
Counties.	Sex of children born, . 1896.	Children born, 1896.	Both native-	Both foreign- born.	Foreign father and native	Foreign mother and native	unkı	ther nown.	Fath unknown	own.	known.
			born.	born.	mother.	father.	Native.	Foreign.	Native.	For- eign.	Both unknown.
Charlevoix	Total Males Females	181 92 89	93 41 52	41 26 15	25 13 12	21 11 10					1
Cheboygan	Total Males Females	377 193 184	99 51 48	161 82 79	62 34 28	53 25 28			2. 1 1		
Chippewa	Total Males Females	414 225 189	54 36 18	276 147 129	44 23 21	33 17 16	1 1	1			5 1 4
Clare	Total Males Females	155 72 83	77 34 43	30 19 11	25 8 17	16 7 9	1 1	1 1	1 1	2 2	2 1 1
Clinton	Total Males Females Unknown	379 208 168 3	306 161 142 3	20 13 7	22 15 7	18 12 6	3 2 1	1 1	2 1 1	2 2	5 2 3
Crawford	Total Males Females	59 34 25	21 15 6	16 7 9	14 7 7	8 5 3					
Delta	Total Males Females	525 275 250	101 45 56	320 174 146	69 36 33	28 15 13				5 4 1	2 1 1
Dickinson	Total Males Females	600 304 296	50 21 29	495 255 240	38 18 20	13 7 6		1 1	1 1	2 2	
Eaton	Total Males Females Unknown	429 213 215 1	379 193 185 1	4 2 2	25 7 18	13 6 7			4 2 2	4 3 1	
Emmet	Total Males Females	199 98 101	120 55 65	24 15 9	30 18 12	14 4 10	2 2	2 2	2 1 1		5 3 2
Genesee	Total	561 283 277 1	403 189 214	32 19 13	68 37 31	43 29 14	2 1 1		5 4 1		8 4 3 1
Gladwin	Total Males Females	99 54 45	32 16 16	31 15 16	24 15 9	11 8 3			1 1		
Gogebic	Total Males Females	651 331 320	59 30 29	526 263 263	38 19 19	18 10 8	1 1	1 1	1 1	3 2 1	4
G'd Traverse	Total Males Females	283 163 120	193 112 81	45 26 19	24 14 10	18 9 9			1 1		2 1 1
Gratiot	Total Males Females	435 237 198	350 194 156	17 13 4	36 16 20	23 10 13	5 2 3		2 1 1	1	1 t
Hillsdale	Total Males Females Unknown	359 168 189 2	332 159 171 2	4 1 3	6 4 2	7 2 5	2 1 1				8 1 7

Table 12.—Continued.—Births by counties, parent nativity and sex.

				Nativ	rity of p	arents	of child	ren bor	n in 1890	3.	
Counties.	Sex of children born, 1896.	Children born 1896.	Both native- born.	Both foreign- born.	Foreign father and native	Foreign mother and native	unkı	ther nown.	Fati unkno Moth	own.	known.
			Doin.	Born.	mother.	father.	Native.	Foreign.	Native.	For-	Both unknown.
Houghton	Total Males Females	1,857 976 881	275 141 134	1,251 662 589	256 135 121	67 36 31		1	3 1 2		4 1 3
Huron	Total Males Females	726 368 358	142 66 76	326 161 165	165 91 74	87 44 43			3 3	2 2	1
Ingham	Total Males Females Unknown	585 315 268 2	388 210 177 1	90 45 45	46 29 17	26 16 10	4	2 2	5 3 2	2 1 1	22 9 12 1
Ionia	Total Males Females	506 253 253	388 203 185	29 15 14	53 21 32	29 13 16			6 1 5		1 i
Iosco	Total Males Females	249 149 100	50 34 16	118 66 52	49 29 20	25 14 11		2 2	2 1 1	2 2	1
Iron	Total Males Females	191 102 89	27 9 18	122 66 56	- 29 - 18 11	4 3 1		4 1 3		1 1	4
Isabella	Total Males Females	462 222 240	284 139 145	85 42 43	46 23 23	42 17 25			2 1 1		3
Jackson	Total Males Females	669 352 317	437 225 212	108 61 47	58 35 23	42 23 19	3	1 1	1 1		19 7 12
Kalamazoo	Total Males Females	591 310 251	344 174 170	155 77 78	47 30 17	29 19 10	2 2		6 4 2	1	7 3 4
Kalkaska	Total Males Females Unknown	99 62 36 1	68 43 25	8 4 4	13 10 2 1	9 5 4					1 1
Kent	Total Males Females Unknown	2,491 1,289 1,198	957 488 467 2	1,027 520 507	272 152 120	149 81 68	5 3 2	8 7 1	21 9 12	11 6 5	41 23 16 2
Keweenaw	Total Males Females	77 48 29	7 4 3	53 34 19	12 9 3	4 1 3			1 1		
Lake	Total Males Females	118 52 66	55 24 31	20 10 10	16 7 9	5 1 4	1				21 9 12
Lapeer	Total Males Females	469 228 241	250 120 130	73 31 42	85 43 42	49 28 21	1 1		3 1 2		8 4 4
Leelanau	Total Males Females	271 152 119	125 77 48	90 48 42	38 19 19	18 8 10					
Lenawee	Total Males Females Unknown	551 297 252 2	452 246 205 1	38 21 17	31 16 15	22 10 12	1 1		6 4 2		1 i

Table 12.—CONTINUED.—Births by counties, parent nativity and sex.

				Nativ	ity of p	arents	of child	ren bor	n in 1896	3.	
Counties.	Sex of children born, 1896,	Chil- dren born	Both	Both	Foreign father	Foreign mother	unkr	ther lown.	Fatl	own.	wn.
	1000.	1896.	native- born.	foreign- born.	and native	and native	Fatl	her—	Moth	er—	nkno
					mother.	father.	Native.	Foreign.	Native.	For- eign.	Both unknown.
Livingston	Total Males Females	264 137 127	207 113 94	15 7 8	27 10 17	14 7 7	1				
Luce	Total Males Females	56 26 30	7 2 5	35 17 18	7 6 1	6 1 5					
Mackinac	Total Males Females Unknown	175 78 94 3	75 29 44 2	66 38 28	18 6 11 1	12 3 9			1		1
Macomb	Males Females	634 329 305	371 196 175	112 57 55	94 48 46	55 27 28		1	1		
Manistee	Total Males Females	804 406 398	190 107 83	507 239 268	63 33 30	40 25 15		1			
Marquette	Total Maies Females Unknown	1,287 653 632 2	171 93 78	864 427 435 2	176 96 80	59 27 32		2 1 1	5 3 2		1
Mason	Total Males Females Unknown	475 234 240 1	170 85 85	202 93 109	73 40 33	25 15 10			2 1 1		
Mecosta	Total Males Females Unknown	381 203 177	221 106 114 1	76 41 35	57 40 17	24 14 10			2 2	1	
Menominee	Total Males Females Unknown	863 455 406 2	176 99 77	497 252 244 1	129 69 60	44 24 20	1	1	3 2 1	2 2	1
M:dland	Males Females	267 125 142	135 53 82	61 37 24	50 22 28	21 13 8					=
Missaukee	Males Females	198 101 97	55 34 21	85 45 40	42 18 24	15 4 11			i		
Monroe	Total Males Females Unknown	712 366 345 1	585 298 287	46 23 23	50 27 23	26 15 11	1		2 1 1		
Montealm	Total Males Females Unknown	581 283 296 2	380 185 195	97 49 46 2	58 28 30	33 16 17			6 2 4		
Montmorency.	Males Females	59 30 29	15 6 9	27 13 14	9 7 2	5 3 2		1			
Muskegon	Total Males Females Unknown	717 385 325 7	240 143 96 1	307 161 143 3	95 41 54	61 32 28 1	i		3 1 2		1

Table 12.—CONTINUED.—Births by counties, parent nativity and sex.

	İ			Nativ	rity of p	arents	of child	ren bor	n in 1896	k.	
Counties.	Sex of children born,	Child- ren born,	Both	Both	Foreign father	Foreign mother	Mor unkr	ther nown	Fatl unkno		Ę.
	1896.	1896.	native- born.	foreign- born.	and	and native	Fatl	ner	Mothe	er—	knov
					mother.	father.	Native.	Foreign.	Native.	For- eign.	Both unknown
Newaygo	Total Males Females	297 156 141	185 103 82	48 23 25	36 14 22	22 13 9			3		
Oakland	Total Males Females	489 254 235	339 173 166	48 23 25	43 24 19	49 27 22	3 3	1 1	4 1 3	2 2	
Oceana	Total Males Females	362 183 179	243 125 118	50 25 25	28 10 18	31 18 13	1 1		5 3 2	1	;
Ogemaw	Total Males Females	69 38 31	25 14 11	28 15 13	10 6 4	6 3 3					
Ontonagon	Total Males Females Unknown	94 42 48 4	33 14 19	21 12 7 2	9 3 5 1		7 4 3	9 4 5	3 1 2	1 1	1
Osceola	Total Males Females	373 181 192	185 88 97	85 46 39	63 31 32	35 15 20	1 1		3 1 2	1	
Oscoda	Total Males Females	34 21 13	21 12 9		7 3 4	4 4		1 1	1 1		
Otsego	Total Males Females	112 58 54	34 19 15	51 25 26	17 10 7	9 4 5			1 1		
Ottawa	Total Males Females Unknown	902 482 417 3	416 216 197 3	287 160 127	104 59 45	83 41 42	3 1. 2	1	5 3 2		
Presque Isle	Total Males Femules	173 79 94	33 14 19	105 46 59	22 15 7	12 4 8					
Roscommon	Total Males Females	20 12 8	11 6 5	4	2 1 1	3 1 2					
Saginaw	Total Males Females Unknown	1,712 887 820 5	669 344 324 1	506 265 241	284 152 131 1	161 83 78	5 2 3	3 1 2	13 6 5 2	3 1 2	6 3 3
Sanilac	Total Males Females	759 395 364	183 96 87	304 161 143	164 80 84	106 58 48	1 1			1 1	
Schoolcraft	Males Females	184 93 91	37 19 18	86 40 46	35 23 12	12 6 6	1 1	10 3 7	1 1	1	
Shiawassee	Total Males Females Unknown	418 205 211 2	304 154 150	31 13 18	49 24 25	26 11 15		1 1	6 2 2 2	1 1	
St. Clair	Total	925 466 456 3	441 212 228 1	199 106 91 2	166 82 84	98 52 46	17 11 6	3 3		1 1	

Table 12. —Concluded.—Births by counties, parent	nauvuu	ana se	x.
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				Nativ	ity of p	arents	of child	ren born	in 1896	i.	
Counties.	Sex of children born.	Child- ren			Foreign	Foreign		ther nown.	Fatl unkno		-
Counties.	1896.	born, 1896.	Both native born.	Both foreign- born.	native	mother and native	Fatl	her—	Moth	er	know
-				-	mother.	father.	Native.	Foreign.	Native.	For- eign.	Both unknown.
St. Joseph	Total Males Females Unknown	358 172 185	283 130 153	20 11 9	25 15 10	10 6 4	1		12 6 6	2 1 1	5 3 1
ruscola	Total Males Females	619 311 308	320 162 158	105 49 56	112 61 51	75 37 38			1 1	1 1	5 2 3
Van Buren	Total Males Females Unknown	449 220 228 1	395 193 202	18 11 6 1	12 4 8	9 3 6	3 2 1		4 2 2		8 5 3
Washtenaw	Total Males Females	572 281 291	869 184 185	93 36 57	54 29 25	40 22 18	6 4 2	1	5 3 2	1	3 2 1
Wayne	Total Males Females	8,119 4,239 3,880	2,106 1,061 1,045	4,147 2,184 1,963	777 421 356	583 304 279	12 5 7	40 22 18	25 14 11	42 27 15	387 201 186
Wexford	Total Males Females	301 158 142	146 68 77	89 52 37	39 21 18	20 14 6	1 1	1	3 1 2		2 1 1

PARENT NATIVITY OF CHILDREN BORN.

The four tables preceding relate to the important subject of the parent nativity of children born in this State during the year 1896, together with such comparisons with the results of previous years as are necessary to a clear understanding of the subject.

From Table 9 it appears that 43.0 per cent of all births were to families consisting of native born fathers and mothers, while in 35.5 per cent of all births, father and mother were both foreign. How these ratios compare with the results of previous years can be seen in Table 10.

By means of quinquennial averages, Table 11 shows the changes in the proportions of parents, by nativity, since 1871. This table may well be compared with the table of similar form in Part III (Table 31), showing the changes in the nativity of persons married for the same periods of time, where analogous changes may be seen to have taken place, although the ratios of native marriages are much larger absolutely. Marriages of foreign born persons consequently appear to be more prolific, since a smaller percentage of marriages produces an equal percentage of children. Additional information on this subject is presented in Tables 13-15, in which the nationalities of parents of children born in Michigan during the year 1896 are stated. Reference may also be made to the comparative study of the fecundity of native and foreign marriages in Michigan given in the Registration Report for 1894, beginning on page 113.

Table 12 exhibits for each county the nativity of the parents of children born in 1896. For the State, the number of parents both native born is in excess of those of foreign birth, but in many counties, especially those of the Upper Peninsula and

those containing large cities, the parents of foreign birth greatly outnumber the native born parents. In the southern part of the State and among the older settled counties, where the birth rate is small, the reverse is generally true, and the foreign-born parents are in the minority.

PARENT NATIONALITY OF CHILDREN BORN IN MICHIGAN, 1896.

By its cross-arrangement Table 13 shows the composition of the families returning births for the year 1896 with respect to the country of birth of father and mother. The column on the left indicates the birthplace of the fathers returned. Taking, for instance, Germany, and reading the horizontal column to the right, we find that 1,243 children were born in Michigan in 1896 whose fathers were born in Germany

Table 13.—Nationality of parents

							•		1	Mothers
Fathers born in—	United States.	Can- ada.	England and Wales.	Scot- land.	Ire- land.	Ger- many.	Aus- tria.	Hol- land.	Bei- gium.	Switz- erland.
United States	19,892	1,743	213	33	117	637	9	147	5	11
Canada	2,578	3,256	100	19	56	97	2	2	2	
England and Wales	496	153	548	7	15	22		1	1	
Scotland	81	76	13	62	11	5	1			
Ireland	253	79	16	5	235	11				
Germany	1,243	108	3	4	7	4,852	12	12	2	12
Austria	27	3	2			24	270		·	
Holland	254	2	1			16		1,120		
Belgium	14	6	1		· 	4		1	88	
Switzerland	21	8	1			11				37
Norway	31	3	1			5			- -	
Sweden	109	14	1		1	13	1			
Denmark	44	3				12				1
Russia	15	2	1			32	2			
Finland	11			····		1				
Poland	59	3				19				
Hungary			2				 			
Bohemia	13	1				1	1		1	
France	43	12			 	9				1
Italy	15	4	5			6	2		:	. 3
All others	148	21	1			5		2	ļ. 	
Unknown	250	51	7	1	4	17		4		2
Total mothers	25,597	5,548	916	131	446	5,799	300	1,289	99	67
Per cent	55.3	12.0	2.0	.3	1.0	12.5	.6	2.8	.2	.1

and whose mothers were born in the United States; 108 had German fathers and Canadian mothers; 3, 4 and 7, respectively, had German fathers and English (or Welsh), Scotch and Irish mothers; 4,852 had both parents of German birth, etc., etc. Passing to the right of the table, we find that the total number of children born to German fathers during the year was 6,323 which number was 13.7 per cent of the total number of fathers. In a similar way, reading down the vertical columns, the number of mothers of any given nationality can be ascertained, together with the proportion of fathers of each nationality with whom they are united.

A table of precisely similar form (Table 34) has been constructed for marriages. It is evident that comparison of these two tables will, with certain precautions afford a measure of the fecundity of marriages of different nationalities. Such comparison may be made, so far as the data at hand will permit, in Table 14.

of children born in Michigan, 1896.

_	1	1	1	E.	1	Y.	1	1	1	1		Total	Per
Nor- way.		Den- mark.	Rus- sla.	Fin- land.	Po- land.	Hun- gary.	Bohe- mia.	France.	Italy.	All others.	Unk.	fathers.	cent.
27	50	23	5	2	15	1	4	16	1	75	116	23,142	50.0
6	10	2		5	5		2	6			37	6,200	13.4
4	9	1								1	12	1,270	2.7
	1		1								2	253	.5
3											9	611	1.3
2	8	5	9		6		2	3	1	4	28	6,323	13.7
							2	1			1	330	.7
1					1						1	1,396	3.0
												114	.2
					1			1				80	.2
243	42	2		.8							1	336	.7
65	1,144	9		18							12	1,387	3.0
6	21	175									1	263	.6
	1	1	160		2	1				I		218	.5
14	5	2		885							1	919	2.0
			1		1,019		7 7 4 7		1	1	3	1,107	2.4
						9						11	
							55					72	.1
1			1					16	1000			83	.2
	100101		200						290	1		326	.7
									-	507	4	688	1.5
1	2		2		2				1	10	819	1,173	2.5
373	1,293	220	179	918	1,051	11	66	43	294	615	1,047	46,302	
					ale se		- 12			17.5	2.27	1434	
.8	2.8	.5	.4	2.0	2.3		.1	.1	.6	1.3	2.3		100.0

Table 14.—Comparison of the number of children born in Michigan in 1896 of parents of given nationality with the number of marriages registered for the year 1896 of the corresponding nationality; also ratios for 1894–95.

Birthplaces of bridegrooms and fathers.	Birthplaces of brides and mothers.	Number of marriages, 1896.	Number of births, 1896.	Children per mar- riage, 1896.	Children per mar- riage, 1895.	Children per mar- riage, 1894.
United States	United States	848	19,892 1,743 213 117 637 147 23,142	1.7 2.1 1.8 2.9 2.0 2.2 1.7	1.8 2.0 1.8 2.5 2.4 2.2 1.8	1.8 1.9 1.7 2.6 2.3 2.3
Canada	United States Canada England and Wales. Ireland. Germany All countries	764	2,578 3,256 100 56 97 6,200	2.2 4.3 3.4 3.7 4.2 3.0	2.0 4.5 2.6 4.3 4.8 2.9	1.9 4.9 3.1 3.7 2.3 2.9
England and Wales	United States Canada England and Wales. All countries	262 61 83 440	496 153 548 1,270	1.9 2.5 6.6 2.9	1.6 2.4 5.8 2.6	1.9 2.6 4.5 2.7
Scotland	United States CanadaAll countries	46 18 78	81 76 253	1.8 4.2 3.2	1.5 3.1 2.6	2.8 5.3 4.4
Ireland	United States Canada Ireland All countries	19 25	253 79 235 611	3.2 4.2 9.4 4.6	2.9 3.5 6.6 3.9	2.9 4.5 5.1 8.6
Germany	United States Canada Germany All countries	713	1,243 108 4,852 6,323	2.7 2.8 6.8 5.0	2.5 3.6 7.0 5.0	2.7 2.5 6.7 5.0
Austria	Austria	77 99	270 330	3.5 3.3	4.4 3.7	6.0 4.0
Holland	United States Holland	99 188 306	254 1,120 1,396	2.6 6.0 4.6	1.6 5.0 3.6	2.1 5.4 4.1
Norway	Norway	44 90	243 336	5.5 3.7	7.2 4.8	5.3 3.3
Sweden	Sweden	209 318	1,144 1,387	5.5 4.4	5.9 4.8	4.3 3.6
Denmark	Denmark.	29 73	175 263	6.0 3.6	8.4 4.8	5,2 3.3
Russia (Finland)	Russia (Finland)	250 297	1,045 1,137	4.2 3.8	4.6 4.2	3.6
Poland	Poland	59 96	1,019 1,107	17.3 11.5	19.6 15.0	22.2 15.9
Italy	Italy	43 60	290 326	6.7 5.4	10.3 7.8	8.8 6.9
All countries	United States. Canada England and Wales. Scotland Ireland Germany Austria Holland Norway. Sweden Denmark Russia (Finland) Poland Italy All countries	1,774 258 51 91 1,148 88 263 79 265 50 291 75	25,597 5,548 916 131 446 5,799 300 1,289 220 1,097 1,051 294 46,302	1.8 3.1 3.6 2.6 4.9 5.1 3.4 4.9 4.7 4.9 4.2 5.1	1.8 3.2 3.3 4.3 5.3 4.2 4.8 5.0 5.3 4.2 16.0 9.6	1.8 3.2 3.1 3.6 5.0 5.4 4.5 3.9 3.7 3.8 3.7 3.8 3.9 4.8 5.2

FECUNDITY OF MARRIAGES BY NATIONALITY, 1896.

In Table 14, marriages of specified nationalities, as stated in Table 34, Part III, are compared with births of children to parents of the corresponding nationalities according to Table 13. No corrections are practicable for varying age distributions of the several nationalities or for marriages contracted prior to arrival in this State; the data should be taken merely as affording a rough means of comparing the relative fecundity of the different nationalities. It is of interest, however, to note that the results for the year 1896 closely correspond as a rule with similar rates obtained for 1894-95, thus showing that there is a somewhat constant relation between the two sets of returns.

In Table 15 the rates per 1,000 population of persons becoming parents during the year 1896 are given for each nationality. It must be remembered that the age distribution of the natives of the United States and those born in foreign countries is very different, and that the latter would naturally show a considerable higher rate of parentage from the larger proportion of adults.

Table 15.—Number of persons of each nationality who became parents in Michigan during the year 1896, with rates per 1,000 estimated population of like nationality; compared with corresponding rates for 1894-95.

Country of birth.	Estimated population, 1896.	Parents of children born, 1896.	Parent rate per 1,000 inhabitants of same nationality, 1896.	Parent rate per 1,000 inhabitants of same nationality, 1895.	Parent rate per 1,000 inhabitants of same nationality, 1894.
All nationalities	2,315,517	92,604	40.0	40.6	39.8
United States	1,731,175	48,739	28.2	28.8	28.1
Canada	209,963	11,748	56.0	58.9	57.9
England and Wales	45,910	2,186	47.6	46.4	45.4
Scotland	11,740	384	32.7	35.0	36.7
Ireland	33,299	1,057	31.7	30.6	32.1
Germany	146,831	12,122	82.6	84.7	80.8
Austria	5,157	630	122.2	99.7	118.9
Holland	34,597	2,685	77.6	67.9	74.7
Belgium	3,207	213	66.4	72.9	76.3
Switzerland	3,287	147	44.7	46.1	45.6
Norway	8,362	709	84.8	93.7	80.3
Sweden	28,613	2,680	93.7	97.6	84.7
Denmark	7,841	483	61.6	73.9	73.2
Russia (including Finland)	18,284	2,234	122.2	115.3	113.4
Poland	15,215	2,158	141.8	183.4	140.6
Hungary	340	22	64.7	76.5	36.4
Bohemia	2,980	138	46.3	60.0	62.0
France	1,683	126	74.9	55.4	38.6
Italy	3,552	620	174.5	170.7	134.2
All others	3,486	1,303	373.8	131.9	579.6
Unknown		2,220			

Table 16.—Exhibiting, for the State and counties, the nationalities of the foreign-born parents of children born in Michigan during the year 1896.

Sex of parents.	Total foreign- born parents, 1896.	Can- ada.	Great Britain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.*
Total Males Females.	41,645 21,987 19,658	11,748 6,200 5,548	2,570 1,523 1,047	1,057 611 446	12,752 6,653 6,099	2,685 1,396 1,289	3,872 1,986 1,886	2,234 1,137 1,097	2,158 1,107 1,051	2,569 1,374 1,195
Total Males Females.	113 60 53	99 50 49	4 4	1 1	1		6 3 3			2 2
Total Males Females.	49 29 20	40 24 16					9 5 4			
Total Males Females.	251 148 103	32 17 15	14 12 2	• 11 8 3	78 50 28	53 27 26	8 5 3			55 29 26
Total Males Females.	677 358 319	319 169 150	14 11 3	6 4 2	267 137 130		47 23 24	8 4 4	9 6 3	7 4 3
Males Females.	174 86 88	84 43 41	8 4 4	6 1 5	15 7 8	17 8 9	4 1 3	1 1	2 1 1	37 20 17
Total Males Females.	181 101 80	147 83 64	2 1 1	3 1 2	24 13 11		3 2 1	2 1 1		
Total Males Females.	101 58 43	53 32 21	5 5	2 1 1			29 14 15	2 1 1	8 4 4	2 1 1
Total Males Females.	53 29 24	9 3 6	5 3 2	7 4 3	20 12 8	9 6 3		1 1		2 1 1
Total Males Females.	1,619 872 747	672 366 306	47 28 19	32 21 11	313 169 144	29 15 14	43 22 21	12 6 6	447 230 217	24 15 9
Total Males Females.	130 69 61	53 28 25	8 6 2	5 3 2	1 1	2 2	52 25 27			9 ⁴ 7 2
Total Males Females.	339 180 159	26 14 12	· 8 5	3 3	243 127 116	3 2 1	14 8 6	26 12 14	8 4 4	3 2 1
Total Males Females.	62 36 26	13 5 8	8 6 2	22	30 20 10	1			6 3 3	2 1 1
Total Males Females.	190 102 88	46 23 23	26 14 12	11 7 4	74 41 33	5 3 2	. 2 1 1			26 13 13
Total Males Females.	40 28 12	13 9 4	3 2 1	2 2	21 14 7		1 1			
Total Males Females.	128 66 62	60 30 30	3 3	4 1 3	35 19 16	6 4 2	14 7 7			6 2 4
(Total Males Females.	437 223 214	261 134 127	· 24 · 11· 13	11 6 5	99 49 50	1 1	28 14 14	4 3 1	2 1 1	7 4 3
	Total Males Females.	Total	Sex of parents. foreignborn born ada. Canborn ada. 1896. 11.748 11.748 Males	Sex of parents. Foreign-born parents. Sex of portion parents, 1896. Canborn parents, 1825. Canborn parents, 182	Sex of parents. Foreign-born parents. Sex of parents. Sex	Sex of parents. Presents Pr	Sex of parents. Foreign born parents. September September	Total	Sex of parents. Foreign	Sex of parents. Total parents. Post pare

^{*} Includes Belgium, Switzerland. Hungary, Bohemia, France and Italy in addition to the countries included under this title ir Table 18.

Table 16.—Continued.—Nationalities of the foreign-born parents of children born in Michigan.

Counties.	Sex of parents.	Total foreign- born parents, 1896.	Can- ada.	Great Britain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
Chippewa	Total Males Females.	630 321 309	514 259 255	44 26 18	13 8 5	17 8 9		23 11 12	8 4 4		11 5 6
Clare	Total Males Females.	104 56 48	74 39 35	4 4	1	18 8 10		7 4 ·3			
Clinton	Total Males Females.	83 43 40	26 12 14	3 2 1	1 1	52 29 23					1 1
Crawford	Total Males Females.	54 30 24	23 13 10	3 1 2	1	3 2 1		20 10 10	1		3 2 1
Delta	Total Males Females.	742 389 353	270 140 130	21 12 9	25 18 7	*98 53 45	1	278 142 136	16 8 8	4 2 2	29 ⁻ 13. 16
Dickinson	Total Males Females.	1,044 534 510	147 75 72	102 60 42	10 6 4	134 65 69		340 172 168	51 24 27	7 3 4	258 129 124
Eaton	Total Males Females.	50 29 21	22 13 9	10 7 3	2 2	6 4 2	1 1	4 2 2	2 1 1		3 3:
Emmet	Total Males Females.	94 56 38	56 34 22	5 3 2	2 1 1	26 14 12		3 3	2 1 1		
Genesee	Total Males Females.	175 100 75	110 59 51	23 14 9	11 9 2	25 15 10					6 3 3
Gladwin	Total Males Females.	97 55 42	86 49 37	5 3 2	1	4 1 3					1
Gogebic	Total Males Females.	1,112 565 547	67 38 29	122 67 55	54 26 28	144 71 73	3 2 1	290 144 146	256 129 127	83 42 41	93 46 47
G'd Traverse .	Total Males Females.	132 69 63	43 27 16	6 1 5	2 1 1	36 17 19		15 7 8	9 6 3	3 1 2	18 9 9
Gratiot	Total Males Females.	94 53 · 41	52 31 21	11 7 4	2 2	20 8 12		1 1			8 5 3
Hillsdale	Total Males Females.	21 10 11	3 1 2	7 3 4	1	7 4 3	2 1 1	<u>1</u>			
Houghton	Total Males Females.	2,826 1,508 1,318	551 322 229	312 180 132	86 45 41	484 261 223		251 120 131	887 447 440	38 19 19	217 114 103
Huron	Total Males Females.	906 491 415	485 249 236	42 30 12	10 8 2	280 150 130	1	5 3 2	3 2 1	73 43 30	7 5 2
Ingham	Total Males Females.	256 138 118	56 34 22	83 19 14	3 2 1	141 70 71		3 2 1	3 2 1	6 4 2	11 5 6

Table 16.—Continued.—Nationalities of the foreign-born parents of children born in Michigan.

Counties.	Sex of parents.	Total foreign- born parents, 1896.	Can- ada.	Great Britain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
-Ionia	Total Males Females.	140 82 58	55 36 19	15 8 7	9 5 4	40 22 18		5 8 2		12 6 6	4 2 2
Tosco	Total Males Females.	814 169 145	141 77 64	6 5 1	2 2	76 40 36		24 13 11	56 28 . 28	4 2 2	5 2 3
Iron	Total Males Females.	282 155 127	60 41 19	19 11 8	11 6 5	47 24 23		65 83 32	54 26 28	19 9 10	7 5 2
Isabella	Total Males Females.	258 131 127	200 97 103	9 6 3	9 5 4	33 19 14		1 1	2 1 1		4 3 1
Jackson	Total Males Females.	317 167 150	72 32 40	66 46 20	27 13 14	127 63 64			6 3 3	.16 8 8	3 2 1
Kalamazoo	Total Males Females.	387 202 185	22 10 12	22 14 8	26 15 11	39 21 18	271 136 135	3 2 1	1		3 3
Kalkaska	Total Males Females.	38 21 17	26 13 13	1 1	2 2	8 5 3					1 1
Kent	Total Males Females.	2,494 1,307 1,187	210 112 98	47 27 20	66 37 29	404 218 186	1,230 633 597	163 84 79	49 27 22	107 56 51	218 113 105
Keweenaw	Total Males Females.	122 65 57	20 12 8	6 4 2	1 1	9 6 3		4 2 2	82 41 41		
Lake	Total Males Females.	61 36 25	31 19 12	4 2 2		14 8 6	2 1 1	10 6 4			
Lapeer	Total Males Females.	280 158 122	178 100 78	19 11 8	2 2	74 41 33		5 3 2			2 1 1
Leelanau	Total Males Females.	236 128 108	48 27 21	4 3 1		81 45 36		72 36 36	1	4 3 1	26 13 13
Lenawee	Total Males Females.	129 69 60	12 6 6	7 6 1	12 8 4	90 46 44		5 .1 4	1 1		2 2
Livingston	Total Males Females.	71 42 29	17 12 5	14 9 5	5 2 3	27 14 13		8 5 3			
Luce	Total Males Females.	74 42 32	35 22 13	1	3 2 1	4 2 2		10 5 5	20 10 10		1 i
Mackinac	Total Males Females.	162 84 78	99 50 49	10 8 2	6 3 3	16 8 8		19 10 9	2 1 1		10 4 6
Macomb	Total Males Females.	374 207 167	64 27 87	7 6 1	3 2 1	266 151 115	1	2 1 1			31 19 12

Table 16.—CONTINUED.—Nationalities of the foreign-born parents of children born in Michigan.

-				Michigo	.,		_				
Counties.	Sex of parents.	Total foreign- born parents, . 1896.	Can- ada-	Great Britain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
Manistee	Total Males Females.	1,118 571 547	98 50 43	18 11 7	2 1 1	372 187 185		325 165 160	13 7 6	293 148 145	2 2
Marquette	Total Males Females.	1,965 1,042 923	419 235 184	392 219 173	82 44 38	• 89 46 43		564 286 278	348 175 173		71 37 34
Mason	Total Males Females.	512 275 237	149 82 67	9 7 2	7 5 2	134 65 69		133 73 60	26 13 13	45 23 22	2
Mecosta	Total Males Females.	234 133 101	115 69 46	7 6 1	5 4 1	54 27 27		46 24 22	6 3 3		1 i
Menominee	Total Males Females	1,170 627 543	376 214 162	4 3 1	3 8	84 43 41	3 1	130 68 62	15 7 8	1 1	553 286 267
Midland	Total Males Females.	193 111 82	121 71 50	8 3 5	7 4 3	48 26 20		3 2 1	4 2 2		8
Missaukee	Total Males Females.	227 127 100	56 29 27	5 5	7 5 2	21 12 9	102 58 44	29 14 15	7 4 8		
Monroe	Total Males Females.	168 96 72	20 9 11	9 4 5		127 76 51			2 1 1	5 8 2	5 8 2
Montealm	Total Males Females.	285 155 130	85 46 39	13 8 5	1 1	58 32 26	3 3	113 60 53		1	11
Montmorency.	Total Males Females.	69 37 32	52 27 25	3 2 1		14 8 6					
Muskegon	Total Males Females.	770 402 368	105 56 49	16 7 9	16 9 7	117 62 55	251 113 120	249 126 123			10
Newaygo	Total Males Females.	154 84 70	45 26 19	7 3 4	1 1	25 13 12	47 26 21	24 13 11	· 5 2 3		
Oakland	Total Males Females	、191 92 99	77 35 42	28 13 15	11 6 5	68 34 34					4
Oceana	Total Males Females.	160 78 82	49 24 25	3 1 2	3 1 2	46 22 24	20 9 11	26 13 13	2 1 1		11
Ogemaw	Total Males Females .	72 38 34	59 29 30	5 4 1	2 2	6 3 3					
Ontonagon	Total Males Females.	61 39 22	41 25 16	4 3 1	1	2 2		4 3 1	9 5 4		
		269	140	14		58	2	50	ĺ	1	

Table 16.—CONCLUDED.—Nationalities of the foreign-born parents of children born in Michigan.

Counties	Sex of parents.	Total foreign- born parents, 1896.	Can- ada.	Great Britain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
Oscoda	Total Males Females.	12 8 4	9 6 3	1 1		1		1 1			
Otsego	Total Males Females.	128 68 60	*44 26 18	4 2 2	2 1 1	35 17 18		9 6 3		31 15 16	3 1 2
Ottawa	Total Males Females.	762 392 370	46 22 24	6 2 4	6 3 3	89 45 44	587 305 282	24 12 12		2 1 1	2 2
Presque Isle	Total Males Females.	244 127 117	44 22 22	2 2	1	179 93 86		<u>1</u>	1 1	15 7 8	1
Roscommon	Total Males Females.	13 6 7	9 4 5	2 2		2 2					
Saginaw	Total Males Females.	1,463 793 670	483 257 226	83 51 32	20 12 8	729 387 342	2 2	23 15 8	10 6 4	77 40 37	36 23 13
Sanilac	Total Males Females.	879 468 411	686 360 326	45 26 19	13 11 2	112 55 57	-,	7 4 3	2 1 1	4 3 1	10 8 2
Schoolcraft	Total Males Females.	230 131 99	113 67 46	9 4 5	3 1 2	31 18 13		58 33 25	14 7 7		2 1 1
Shiawassee	Total Males Females.	139 81 58	78 44 3 4	16 13 3	4 3 1	32 17 15		2 1 1			7 3 4
St. Clair	Total Males Females.	666 368 298	411 221 190	63 36 27	20 12 8	161 92 69		4 8 1			7 4 3
St. Joseph	Total Males Females.	77 45 32	3 3	8 8		64 33 31	2 1 1				
Tuscola	Total Males Females.	398 217 181	293 162 131	30 17 13	7 4 3	61 29 32			3 3		4 2 2
Van Buren	Total Males Females.	57 30 27	16 8 8	9 7 2	3 1 2	25 12 13	4 2 2				
Washtenaw	Total Males Females.	282 148 134	43 21 22	22 9 13	11 8 3	195 103 92		1 1	1 1	523	4 3 1
'Wayne	Total Males Females.	9,736 4,964 4,772	1,600 724 876	526 307 219	301 166 135	5.627 2,880 2,747	16 8 8	20 11 9	190 102 88	821 417 404	635 349 286
Wexford	Total Males Females.	238 129 109	66 35 31	5 4 1	3 3	17 9 8	7 4 8	129 68 61	8 4 4		3 2 1

BIRTHS OF SPECIAL STATISTICAL INTEREST.

After concluding the discussion of births as a whole, it is customary to devote several tables to some special classes of births, namely, stillbirths, twins, and illegitimates. The first group has intimate relations with the subject of mortality, and, in fact, the total number of stillbirths appears in all of the tables of deaths in Part IV as well as in this part of the Report. The frequency of plural births is of both popular and scientific interest, and the subject of illegitimacy is also of great practical significance.

Table 17.—Number of stillbirths, pairs of twins and illegitimate children born in Michigan during the year 1896, by counties.

				,			
State and counties.	Number of still- births in 1896.	Number of pairs of twins born in 1896.	Number of ille- gitimate children born in 1896.	. Counties.	Number of still- births in 1896.	Number of pairs of twins born in 1896.	Number of ille- gitimate children born in 1896.
State	1,254	520	369	Keweenaw	5	1	1
				Lake	4 13	5	1 2
Alcona	3	1	 	Lapeer Leelanau	2	7	
Alger	1			Lenawee	10	4	3
Allegan	20	9	6				
Alpena Antrim	10 5	6 5	2	Livingston	1 2	1 2	1
Arenac		2	2	Luce	6	í	1 2
ATOM CO		~		Macomb	. ğ	l ŝ	2
Baraga	3		5	Manistee	82	4	2
Barry	12	7	2				
Bay	19	17	6	Marquette	50	18	5 3
BenzieBerrien	4 17	2	4 3	Mason	14 10	3	8 7
Derrien	1,	*1	9	Menominee	35	11	5
Branch	14	8	1	Midland	6	4	
Calhoun	29	16	4			1	
Cass	6	. 8	2	Missaukee	8	2	1
Charlevoix	3 12	2 3	1 2	Monroe	17 18	10	3 5
Cheboygan	12	3	~	Montealm	3	3	1 . i
Chippewa	6	4	5	Muskegon	22	9	3
Clare	2		4			_	
Clinton	6	5	2	Newaygo	8	4	3
Crawford Delta	2 21	5	i-	Oakland Oceana	7 8	10	1 8
Delta	21	9	1 1	Ogemaw	î	3	°
Dickinson	4	6	2	Ontonagon	4	2	
Eaton	9	7	3			l .	
Emmet	4	5	6	Osceola	1	4	2
GeneseeGladwin	13 1	9	4 1	Oscoda	1	1	. 1
Glauwin	1		l •	Ottawa	12	12	1 4
Gogebic	7	5	3	Presque Isle	1 2		l î
Grand Traverse	2	1		_			
Gratiot	5	4	3	Roscommon			1 1
Hillsdale Houghton	7 37	6 14	8	Saginaw	77 19	15 12	27
Houghton		13	°	Schoolcraft	14	12	i
Huron	15	8	6	200000000000000000000000000000000000000	-		1
Ingham	25	7	3	Shiawassee	5	4	2
Ionia	15 14	6 2	6 1	St. Clair	13	7 3	
Iosco	11	1 1	1	St. Joseph Tuscola	6	8	1 3
	**	١ .		1 450014	i **	1	"
Isabella	6	7	5	Van Buren	13	1	1
Jackson	24	.5	3	Washtenaw	6	_6	1.4
Kalamazoo	22 5	11	7	Wayne Wexford	268	74	127
Kalkaska Kent	94	2 21	21	w extoru	"	°	
	97	~1	~ 1	[- ·		l	l

Table 18.—The relation of stillborn, twin and illegitimate children to total births returned, for the years 1887-96, and the average for the ten-year period. Also the number of pairs of twins and cases of triplets in each year.

	.,,	. Stillb	irths.	Tw	ins.	Illegiti	mates.		
Years.	All children born.	Number.	Per 1,000 births.	Number.	Per 1,000 births.	Number.	Per 1,000 births.	Pairs of twins.	Cases of triplets,
1887	46,226	897	19.4	1,056	22.8	422	9.1	528	5
1888	48,952	1,358	27.7	1,170	23.9	591	12.1	583	8
1889	49,272	1,202	24.4	1,054	21.4	421	8.5	527	6
1890	52,306	1,397	26.7	1,542	29.5	455	8.7	771	6:
1891	50,812	1,090	21.5	1,354	26.6	389	7.7	. 677	7
1892	46,221	1,014	21.9	1,114	24.1	405	8.8	557	6-
1893	47,722	1,019	21.4	986	20.7	505	10.6	493	3
1894	44,596	1,002	22.5	856	19.2	355	8.0	428	8
1895	46,273	1,109	24.0	956	20.7	402	8.7	478	5-
1896	46,302	1,254	27.1	1,040	22.5	369	8.0	520	7
Average, 1887-96	47,868	1,134	28.7	1,113	23.3	431	9.0	556	6

TRIPLETS.—There were seven cases of triplets reported for 1896, as follows:—Gogebic county, born in May, males, parents both foreign; Kent county, born in November, 1 male, 2 females, 1 female only born alive, parents both foreign; Macomb county, born in March, 1 male, 2 females, parents both native; Saginaw county, born in May, 1 male, 2 females, parents both foreign; Sanilac county, born in November, females, foreign father and native mother; St. Clair county (2 sets), both born in August, 2 males and 1 female, native parents, and all females, foreign father and native mother. One of the latter stillborn.

Table 19.—Exhibiting, by sex and months, the number of stillborn, twin and illegitimate children returned in Michigan for the year 1896.

		-				1	Mont	hs o	of bi	rth,	1896.				,
Condition.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Stillbirths	Total Males Females Unknown	1,254 687 520 47	86 42 41 3	86 49 35 2	99 51 44 4	112 57 51 4	106 62 41 3	95 53 37 5	100 56 38 6	97 55 36 6	108 54 54	102 56 42 4	120 64 52 4	138 85 48 5	5 9 1
Twins*	Total Males Females Unknown	1,040 527 511 2	33	76 41 35	80 35 45	88 37 51	84 41 43	104 50 54	104 51 53	110 67 43	76 40 36	100 41 59	70 36 34	84 51 33	9
Illegitimates	Total Males Females Unknown	369 179 188 2	29 19 10	39 21 18	45 22 23	46 24 22	29 5 24	26 11 15	17 10 7	26 14 12	20 8 12	23 10 13	29 13 16	37 22 15	1 2

^{*} The total number of twin children, i. e, twice the number of pairs of twins. Triplets are not included.

Table 20.—Parent nativity of stillborn, twin and illegitimate children returned in Michigan for the year 1896.

		Number of stillborn children, 1896. Number of pairs of twins, 1896.								Number of illegitimate children, 1896.			
Nativity of parents.	Total.	Males.	Females.	Unknown.	Total	Males.	Females.	One of each.	Unknown.	Total.	Males.	Females.	Unknown,
All nativities	1,254	687	520	47	520	158	150	211	1	369	179	188	2
Both native born	436	231	185	20	243	68	70	105		48	28	18	2
Both foreign born	365	199	155	11	162	48	50	64		15	7	8	
Foreign father and native mother	111	71	37	3	69	27	18	24		8		8	
Foreign mother and native father	57	32	23	2	28	9	8	11		6	4	2	
Unknown mother, father native	8	4	4		4	1	1	2		2	2		
Unknown mother, father foreign	4	3	1		3	2	1						
Unknown father, mother native	8	2	4	2	4	1	1	r	1	113	52	61	
Unknown father, mother foreign	3	2	1		1			1		26	18	8	
Both unknown	262	143	110	9	6	2	1	3		151	68	83	
One or both native*	620	340	253	27	348	106	98	143	1	177	86	89	2
One or both foreign*	540	307	217	16	263	86	77	100		55	29	26	

^{*} Including cases in which nativity of either parent is unknown.

Table 21.—Exhibiting the proportion of males to females among children born alive, stillbirths, twins and illegitimates in Michigan during the years 1887-96, with average for the ten-year period.

	Childre	en born	aliv	re.	S	tillb	irth	S.		Tw	ins.*		m	egiti	imat	es.
Years.	Males.	Females.	Unknown.	Males per 100 females.	Males.	Females.	Unknown.	Males per 100 females.	Males.	Females.	Unknown.	Males per 100 females.	Males.	Females.	Unknown.	Males per 100 females,
1887	23,523	21,771	35	108	503	359	35	140	575	481		120	196	224	2	88
1888	24,717	22,867	10	108	809	534	15	151	617	549		112	293	298		98
1889	24,950	23,099	21	108	692	483	27	143	547	507		107	200	219	2	91
1890	26,766	24,100	43	111	757	587	53	129	720	816	6	88	232	217	6	107
1891	25,856	23,812	54	109	583	434	73	134	637	711	6	90	174	204	11	85
1892	23,551	21,621	35	109	597	374	43	160	553	559	2	99	191	206	8	93
1893	24,162	22,511	30	107	572	398	49	144	490	486	10	101	278	227		122
1894	22,604	20,976	14	108	549	402	51	136	448	408		110	164	188	3	87
1895	23,206	21,941	17	106	631	413	65	153	458	496	2	92	200	201	1	100
1896	23,182	21,840	26	106	687	520	47	132	527	511	2	103	179	188	2	95
Average, 1887-96	24,252	22,454	29	108	638	450	46	142	557	552	3	101	211	217	4	97

^{*} Twin children, i. e., twice the number of pairs of twins born; triplets not included.

Table 22.—Exhibiting the parent nativity of plural births* in Michigan for the ten years 1887-96, inclusive.

		Native	e born.	Foreig	n born.	Miz	ed.	Unknown.		
Years.	Total.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	Num- ber.	Per cent.	
1887	1,071	448	41.8	423	39.5	168	15.7	32	3.0	
1888	1,194	485	40.6	530	44.4	159	13.3	20	1.7	
1889	1,072	410	38.3	486	45.3	172	16.0	4	.4	
1890	1,561	437	28.0	904	57.9	200	12.8	20	1.5	
1891	1,375	434	31.6	746	54.3	173	12.6	22	1.0	
1892	1,132	418	36.9	472	41.7	212	18.7	30	2.7	
1893	995	397	39.8	418	42.1	150	15.1	30	3.0	
1894	880	418	47.5	297	33.8	145	16.5	20	2.8	
1895	971	420	43.3	347	35.7	183	18.8	21	2.2	
1896	1,061	492	46.4	333	31.4	224	21.1	12	1.1	
Average, 1887-96	1,131	436	38.5	496	43.9	179	15.8	21	1.6	

^{*} Triplets included.

Table 23.—Exhibiting the nativity of the mothers of illegitimates in Michigan for the years 1887-96, inclusive.

		M	others of	illegitim	te childre	en.			
Years.	(Dotto)	Native. Foreign.				Unkr	Unknown.		
	Total.	Number.	Percent.	Number.	Percent.	Number.	Per cent.		
1887	422	151	35.8	72	17.1	199	47.2		
1888	591	149	25.2	72	12.2	370	62.6		
1889	419	126	30.1	73	17.4	220	52.5		
1890	450	148	32.9	73	16.2	229	50.9		
1891	386	143	37.1	66	17.1	177	45.8		
1892	405	163	40.2	71	17.5	171	42.2		
1893	501	223	44.5	111	22.2	167	33.3		
1894	352	194	55.1	58	16.5	100	28.4		
1895	396	217	54.8	81	20.5	98	24.7		
1896	36 5	165	45.2	47	12.9	153	41.9		
Average, 1887-96	429	168	39.2	72	16.8	188	43.8		

STILLBIRTHS. TWINS AND ILLEGITIMATES.

Tables 17 to 23, inclusive, are devoted to the consideration of certain classes of births of peculiar interest, namely, births of stillborn children, of twins and of illegitimate children. Stillbirths are returned as deaths as well as births, and in practice it is found that a careful comparison of the two sets of returns is necessary in order that none may be omitted or twice counted. Stillbirths are defined, for registration purposes, in the instructions issued to the enumerators (supervisors), as cases in which the children were born dead, not having lived an appreciable time, hours or days, after birth. It was observed in the examination of the returns that frequently cases would be reported as "stillborn" in which the child was also reported to have lived a day or more. For such cases the enumerators are directed to report another cause of death, and the term "unknown" is substituted for "stillborn" if no other cause can be ascertained.

Following the custom practiced in these Reports since 1868, stillbirths are compiled both as births and deaths; since 1873 the stillbirths returned in each set of returns have been individually compared, and the total number, exclusive of duplicates, has been inserted in all the tables of births and of deaths. This is not the usual statistical practice, which is to exclude stillbirths from both births and deaths, since they do not add to the population or decrease it. For comparison with statistics of other states and countries, it is usually necessary, therefore, to diminish the Michigan returns of deaths by about 5 per cent, this being the usual percentage of stillbirths to total deaths, and the returns of births by about two per cent for a similar reason. In Table 3, Part I, may be found a statement of stillbirths and stillbirth rates for each year of registration, together with comparisons with total births and deaths. It is a preliminary step to the separate statement of stillbirths, apart from both births and deaths. In the tables in Part IV, accordingly, stillbirths are separated from other deaths under one year of age.

DELINQUENT TOWNSHIPS AND TOWNSHIPS REPORTING NO BIRTHS, 1896.

Tables 24 and 25 respectively present the townships and wards reporting no births for the year 1896, and those whose supervisors failed to perform their duty and make returns to the county clerk as required by law. The aggregate population of townships in which it was stated that no births occurred was 2,358. The aggregate population of delinquent townships for 1896 was 6,165. In both classes it is undoubtedly true that births actually occurred during the year in many cases, and that neglect or forgetfulness of a somewhat troublesome duty is chiefly responsible for failures to report.

Table 24.—List of townships in which it was reported that no births occurred in 1896, showing population in 1894.

County.	Township.	Population, June 1, 1894.
Clare	Harrison, 1st ward Franklin	224 178
Crawford	South Branch	108- 95
Gladwin	{ Billings } Buckeye	122 ⁻ 254
Kalkaska	Glade	122
Lake	Lake	89
Luce	Columbus	57
Mackinac	Portage	158-
Montmorency	Wheatfield	130
Ontonagon	Carp Lake	53
Roscommon	Gerrish Markey Nester St. Helens	64 39 211 297
Wexford	Slagle	157
Total population reporting no births		2,358-

Table 25.—List of townships from which no returns of births were received for 1896, showing population in 1894. (List closed December 1, 1897.)

County.	Township.	Population, June 1, 1894.
Alcona	Alcona	985-
Charlevoix	Soyne Valley	735 80•
Ogemaw	(Beaver Lake	97 81 623-
Schoolcraft	Hiawatha	1,612
St. Clair	Clay	1,952
Total population of delinquent townships		6,165

PART III.—MARRIAGES IN MICHIGAN DURING THE YEAR 1896.

The number of marriages registered in Michigan during the year 1896 was 18,897, a decrease of 55 from the preceding year. Both 1895 and 1896, however, had many more marriages than were recorded in 1894. The marriage rate of the year 1896 was 16.3 persons married per 1,000 estimated population as compared with a rate of 16.6 for the preceding year.

Comparison of the number of marriages and marriage rates for each year of registration may be made by means of Table 2, Part I. Also in Tables 5 and 6, Part I, the returns of marriages and marriage rates are given for each county, and it may be noted whether the returns show an increase or decrease, and to what extent. The changes were mostly small variations in the different counties, few showing any very marked alterations in rates.

The usual statistical analysis of the results of the compilation of marriages for the current year is presented in the following text and tables. No new tables have been introduced on this subject in the present Report, but the important distinction between the general nativity and specific country of birth or nationality, has been continued and will yield some most interesting results. Also the necessity for some revision of our present marriage license law, providing for the surer disposal, and possibly the limitation, of marriage licenses is apparent from the considerable number of licenses issued (see Table 28) from which no return is ever received.

Marriages have long been registered in Michigan more accurately than any other class of vital statistics, and data have been accumulated that are well worthy of careful study. There is probably no other state in the west where the statistics are as readily accessible, and for this reason the attention of sociological students might with advantage be directed to the material contained in these Reports. Of course in the routine treatment of an official statistical report it is quite impossible to touch on many subjects which might prove of interest; it is hoped that enough has been done, however, to suggest their importance, and the Department will be glad to afford any additional information in its possession to workers on sociological subjects at any time.

SUMMARY OF THE REGISTRATION OF MARRIAGES IN 1896.

SUMMARY OF THE REGISTRATION OF MARRIAGES IN 1896.
A condensed statement of the principal features of interest in the registration of marriages in Michigan for the year 1896 is herewith presented:
Total number of marriages performed,
The largest number of marriages of any month in the year occurred in November,
2,028 or 10.7 per cent; the smallest number was recorded for August, 1,288 or 6.6 per cent.
Of the 18,897 marriages, there were:
Both bridegroom and bride of native birth,
Including mixed marriages, i. e., those in which the parties were of different nativities, there were married:
Males of native birth,
Males of foreign birth, 5,487
Females of native birth,
Females of foreign birth, 4,570
The following are the most important combinations by nationality:
Males native, females born in Canada, 848
Males born in Canada, females native,
Both males and females born in Canada,
Males born in Germany, females native,
Both males and females born in Germany, 713
Of the 37,794 persons married, the following was the distribution according to color:
White,
Colored (Black, 148; Mulatto, 115; Indian, 105; unknown color, 4), 872
As to age at marriage, the most important groups were:
Males aged 20 to 24 inclusive, 7,029 or 87.2 per cent.
Males aged 25 to 29 inclusive, 5,882 or 31.1 per cent.
Females aged under 20 years, 5,496 or 29.1 per cent.
Females aged 20 to 24 inclusive, 7,685 or 40.7 per cent.
Average ages of each nativity, by sex, were as follows:
Average age of native born males married in 1896,
Average age of native born females married in 1896, 28.6 years.
Average age of foreign born males married in 1896, 30.4 years. Average age of foreign born females married in 1896, 25.6 years.
•
The number of persons of each sex married at ages under those established by law is of importance. Each year a few such cases are returned, but, on the whole, the
provisions of the license law in this respect are carefully observed. The record for
1896 is unusully good, no marriages of males and only three marriages of females at

unlawful ages having been returned.

Number of females married below legal age (16 years),

The arrangement and contents of the tables relating to marriages are as follows:

Synopsis of tables relating to marriages.

Table.	Marriages in Michigan, 1896.
26.	Marriages, by months, for each of the years 1887-96, inclusive; with average for the ten-year period.
27.	Comparison of marriages, by months, for the year 1896, with the corrected average for the ten-year period, 1887-96.
28.	Licenses issued on which returns were not made during the year 1896, by counties; with percentage of licenses not returned to licenses returned.
29.	Marriages by months, 1896,—detailed statement by counties. Note on color of persons married in Michigan in 1896.
30.	Number and per cent of persons married, by nativity and sex, 1896.
31.	Marriages in Michigan, by nativity, in the year 1896, and averages for five successive quinquennial periods.
32.	The average ages, by nativity, of persons married in Michigan during the years 1887-96; with the mean of the ten-year period.
33.	Marriages and persons married, by nativity, in Michigan, during the year 1896, showing distribution by counties.
34.	Intermarriages, by nationality, 1896.
35.	Marriage rates, by nationality, in Michigan, 1894-96.
36.	Nationality of foreign-born persons married in Michigan in 1896, showing distribution by counties.
37.	Marriages in 1896, arranged according to the periods of age of bridegrooms and brides, with distinction of civil condition.
38.	Number of first marriages, second marriages, etc., performed in Michigan in 1896.
39.	Number of persons married in Michigan under the legal ages, by sex, during ten years, 1887-96.
40.	Number of females married in Michigan at each year of age under 20 during the years 1894-96.
41.	Statement of the per cents of males married at each period of age in the year, 1896, with averages for five successive quinquennial periods, 1871-95.
42.	Statement of the per cents of females married at each period of age in the year 1896, with averages for five successive quinquennial periods, 1871-95.
43.	Persons married, by sex and periods of age, in each county, 1896.

MARRIAGES BY MONTHS.

Table 26 shows the number of marriages returned for each month of the year 1896 in convenient form for comparison with the corresponding figures for each of the years 1887-96, and with the average of the decade. The maximum for 1896 occurred in November, its usual place. The minimum number registered was for the month of August. February has usually the smallest number of marriages, owing partly to the fact that that calendar month is the shortest of the year, and partly to the fact that the daily marriage rate of this part of the year is nearly or quite the lowest of that at any other season. This fact, and the true relations of the months as to the relative numbers of marriages performed in them, are shown by Table 27, in which the average daily number of marriages for each calendar month of the year 1896 and of the ten-year period, 1887-96, and also the relative rank of each month on a scale of 100, are given. In the figures given for the ten-year period, care has been taken to increase the numbers registered by the ratio between the average population of the decade and that of the year 1896, thus making the two sets of figures directly comparable.

Table 26.—Marriages returned, by months, for the years 1887-96; with average for the ten-year period.

	Total						Mor	iths of	marr	iage.				
Years	mar- riages.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1887	17,179	1,192	1,087	1,288	1,322	1,348	1,321	1,342	1,426	1,798	1,555	1,776	1,724	5
1888	17,297	1,280	1,204	1,218	1,511	1,315	1,244	1,254	1,218	1,582	1,824	1,836	1,804	7
1889	18,317	1,439	1,331	1,415	1,398	1,459	1,404	1,382	1,256	1,652	1,908	1,892	1,778	3
1890	18,664	1,315	1,252	1,249	1,614	1,356	1,482	1,436	1,314	1,739	1,854	2,057	1,994	2
1891	19,244	1,466	1,326	1,339	1,623	1,419	1,502	1,380	1,383	1,749	1,986	1,984	2,086	1
1892	20,107	1,335	1,455	1,542	1,543	1,590	1,751	1,386	1,407	1,826	2,037	2,181	2,049	5
1893	19,197	1,452	1,273	1,318	1,663	1,574	1,769	1,408	1,356	1,730	2,018	2,060	1,574	. 2
1894	18,220	1,366	1,060	1,403	1,552	1,348	1,486	1,262	1,256	1,704	2,034	1,992	1,754	3
1895	18,952	1,389	1,342	1,324	1,536	1,456	1,690	1,367	1,349	1,658	2,110	2,036	1,694	1
1896	18,897	1,443	1,271	1,368	1,684	1,361	1,762	1,305	1,238	1,759	1,826	2,028	1,846	6
Average 1887-96	18,605	1,368	1,260	1,346	1,545	1,423	1,545	1,352	1,320	1,719	1,915	1,984	1,830	4

Maxima in full-face type; minima in italics.

Table 27.—Comparison of marriages registered for the year 1896, by months, with the ten years 1887-96, showing average daily number registered in each month, and the rank of each month on a standard scale of 100. Data for ten-year period 1887-96 corrected for increase of population.

		Year 1896.		Average o	of ten year	s, 1887-96.
Year and months.	Marriages registered.	Average daily number.	Rank.	*Marriages registered.	Average daily number.	Rank.
Year	18,897	. 51.6		20,062	54.9	
January	1,443	46.5	90	1,475	47.6	87
February	1,271	43.8	85	1,359	48.0	87
.March	1,368	44.1	85	1,451	46.8	85
April	1,684	56.1	109	1,666	55.5	101
May	1,361	43.9	85	1,534	49.5	90
June	1,762	58.7	114	1,666	55.5	101
July	1,305	42.1	82	1,458	47.0	86
August	1,238	39.9	77	1,423	45.9	84
September	1,759	58.6	114	1,854	61.8	113
October	1,826	58.9	114	2,065	66.6	121
November	2,028	67.6	131	2,139	71.3	130
December	1,846	59.5	115	1,973	63.6	116
Unknown	6		·····	4		
Average month	1,575	51.6	100	1,672	54.9	100

^{*} Numbers given in Table 26 multiplied by 1.0783, the ratio between the population of Michigan in 1896 and the average estimated population of the period 1887-96. The monthly and daily numbers are, therefore, directly comparable for the year and ten-year period.

LICENSES ISSUED, BUT MARRIAGES NOT RETURNED, BY COUNTIES, 1896.

A very important exhibit is made in Table 28 of the number of licenses issued in each county of the State during the year 1896, for which returns have not been made. The aggregate number for the entire State was 402, or 2.1 per cent of the total marriages of the year. Whether marriages were solemnized on these licenses or not, there is no way of determining. In the majority of instances they probably were, and the failure of the completed marriage record to appear is the result of negligence and disregard of the law on the part of the clergyman or justice of the peace who performed the ceremony, or, possibly, may be due to carelessness in the office of the county clerk. Certainly, counties having the highest percentages of incomplete returns, as Arenac, 11.1; Chippewa, 6.9; Mackinac, 8.6; Menominee. 4.7: Presque Isle, 4.8; Schoolcraft, 7.3; Washtenaw, 6.5; and Wayne, 6.1, ought to show better results. A slight improvement is seen, however, as compared with 1895, which had 480 licenses unreturned, which may be due to the fact that this Department sent out special blanks for the use of county clerks in securing these delinquent returns from clergymen and justices. The penalty of the law for failure or refusal to make returns within ten days has also been printed on all licenses issued, so that it will be prominently presented to persons performing marriage ceremonies.

The marriage license law has now been in operation in Michigan since 1887, and clergymen, magistrates and all concerned in its practical administration should be thoroughly conversant with the duties imposed upon them. This is especially true of persons who receive a fee for performance of the ceremony of marriage, and who supposedly bind themselves to a complete discharge of the duties thereby incurred. One of the most important of these duties from the standpoint of the future legal relations of the persons married is the preservation of an accurate official record, and it may be considered a gross neglect of duty when such record is not made and filed in accordance with the law. For these reasons no hesitation whatever should be felt in promptly prosecuting any clergyman or magistrate who neglects or wilfully refuses to register all marriages performed by him. The State Department endeavors, by tracing each license returned with marriage uncertified, to reduce the number of missing records, but the task is attended with many difficulties.

It may be suggested that a more rigid supervision of the licenses issued might be desirable, in order to secure more accurate records. It would be valuable if each application for license should contain a memorandum of the probable person to perform the ceremony, so that inquiry could be made in case the return was not promptly received. County clerks can request this information at the time of issuing the license, and will find that it will greatly facilitate the accuracy of the records. Also a marriage license might expire by limitation within a reasonable time, say ninety days after issue. We would then be sure that if the license was not returned within that length of time that it could not be used without renewal at the county clerk's office. Of course such renewal should be without fee on the return of the unused license previously granted. As it is, licenses are sometimes kept for years, and their return after a long interval from their date of issue tends to cause many unnecessary inaccuracies in the official records.

Table 28.—Licenses issued on which returns were not made during the year 1896, by counties; with percentage of licenses not returned to licenses returned.

		· ·				<u></u>	
State and counties.	Licenses returned (mar- riages).	Licenses not returned.	Per cent of licenses not returned to mar- riages.	Counties.	Licenses returned (mar- riages).	Licenses not returned.	Per cent of licenses not returned to mar- riages.
State	18,897	402	2.1	Kent Keweenaw	1,049 11	14	1.3
				Lake Lapeer	40 246	4	1.6
Alcona	42			1 -	-	_	
Alger	41	1	2.4	Leelanau	62	2	3.2
Allegan	330	2	.6	Lenawee	464	1	.2
Alpena	125 106	3	3.2	Livingston	182 16	3	1.6
Antrim	100	8	2.8	Luce	10		
Arenac	63	7	11.1	Mackinac	58	5	8.6
Baraga	38	2	5.3	Macomb	243	Ž	.8
Barry	229			Manistee	192	2 2	1.0
Bay	479	17	3.5	Marquette	306	2	.7
Benzie	89	3	3.4	Mason	119		
Berrien	435	3	.7	Mecosta	161	3	1.9
Branch	238	3	1.3	Menominee	148	1 7	4.7
Calhoun	403	5	1.2	Midland	88	i	ī.i
Cass	196	ž	1.0	Missaukee	47	l î	2.1
Charlevoix	100			Monroe	302	5	1.7
Chaharan	112	4	3.6	Montcalm	261		
Cheboygan Chippewa	172	12	6.9	Montmorency.	19		
Clare	51	1 2	3.9	Muskegon	234	2	.9
Clinton	229	l $\tilde{5}$	2.2	Newaygo	180	ĺ ĩ	.6
Crawford	25			Oakland	319	6	1.9
5-14-	124	١ .	ا م ا	0	100	ŀ	
Delta	154	3	1.9	Oceana	160		
Dickinson	130 305	3 4	2.3	Ogemaw	42 36		
Eaton	305 117	1	1.3 .9	Ontonagon	128	2	1.6
Emmet	357	4	1.1	Osceola Oscoda	18	_	1.0
donesco		i -		030044	10		
Gladwin	51	2	3.9	Otsego	40		
Gogebic	133			Ottawa	305	3	1.0
G'd Traverse	144			Presque Isle	42	2	4.8
Gratiot Hillsdale	274 256	2 2	.7	Roscommon	6 649	12	1.8
niiisuale	200	·		Бавшам	0.30	12	1.0
Houghton	432	1	.2	Sanilac	249	2	.8
Huron	218	3	1.4	Schoolcraft	55	4	7.3
Ingham	335	4	1.2	Shiawassee	334	5	1.5
Ionia	811	4 2	1.3	St. Clair	471	10	2.1
Iosco	77	2	2.6	St. Joseph	266	3	1.1
Iron	19	l		Tuscola	304	2	.7
Isabella	163	2	1.2	Van Buren	288		
Jackson	447	9	2.0	Washtenaw	324	21	6.5
Kalamazoo	406	3	.7	Wayne	2,413	148	6.1
Kalkaska	52	2	3.8	Wexford	136	1	.7
		1	1			l	l

MARRIAGES BY MONTHS, BY COUNTIES, 1896.

The detailed exhibit by counties and months of marriages returned in 1896 is seen in Table 29. To this table is appended a statement of the facts in regard to marriages of colored persons, which has formerly been presented in a special table. The total number of colored marriages is so small, however, that this table consisted mainly of blank spaces, and it is believed that the data can be better examined in the condensed form here given.



Table 29.—Distinguishing, by counties and months, the number of marriages returned for the year 1896.

State	Year.	Months, 1896.												
and counties.	1896.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk
State	18,897	1,443	1,271	1,368	1,684	1,361	1,762	1,305	1,238	1,759	1,826	2,028	1.846	
Alcona	42	5	3	5	4	3	1	4	4	4	2	4	3	
Alger	41	1	2	0.00	3	1	3	7	1	8 26	37	32	38	
Allegan	330	18	18	38	27	29 14	31	17	19 15	10	5	13	13	
Alpena	125 106	11 10	7	8	13	12	10	-8	8	9	3	11	13	
Arenac	63	6	6	4	9	5	2	3	3	7	10	6	2 7	
Baraga	38	3	5	2	2	2	8	3		3	2	1	7	
Barry	229	15	16	22	15	10	17	17	13	25	28	26	25	
BayBenzie	479 89	43	36	32	47	26	43	30 6	40 11	51 12	55	42	34	
	- 25	1.3		100			30	155	33	48	31	51	44	
Berrien	435 238	29	41 20	36 26	31	27 12	15	34 17	11	16	23	31	25	
Branch	403	27	21	32	39	21	35	28	26	37	48	37	52	
Dass	196	18	11	16	10	13	21	15	14	14	20	22	22	
harlevoix	100	6	5	7	8	7	10	10	5	12	7	13	10	
Cheboygan	112	12	4	6	7	6	12	12	14	12	13	7	.7	
Chippewa	172	18	13	11	10	18	8	21	16	19	7	19	12	
Dlare	51	6	3	9	3	4	4	3	18	17	19	30	33	****
Clinton	229 25	8 2	17	25	23	14	11 3	14	2	2	3	2	5	
The second of	154	8	5	13	21	11	14	13	9	20	17	14	9	
Delta	130	7	7	5	17	11	13	16	8	11	11	13	11	
Eaton	305	26	18	26	21	21	26	26	16	30	25	35	35	
Emmet	117	3	6	7	16	4	10	9	8	14	14	13	13	
denesée	357	32	27	33	29	28	25	24	21	27	32	40	39	
Bladwin	51	3	5	2	2	3	2	2	6	7	8	2	9	
logebic	133	11	17	5	12	12	11	6	12	14	12	15	6	
3r'd Traverse_	144	13	6	8	20	9	14	15 16	11	13	15 23	32	17 30	
Gratiot	274 256	23 15	17 16	21 30	28 22	21 17	13 24	12	17 12	23	32	27	26	
Houghton	432	32	20	14	41	40	44	42	42	51	43	41	22	
Huron	218	15	23	10	11	14	18	15	11	17	25	37	22	
ingham	335	26	26	35	26	18	30	19	21	20	37	45	32	
lonia	. 311	25	18	23	24	32	25	24	18	24	22	39	37	
losco	77	6	8	2	10	5	5	5	4	11	2	11	8	
ron	19	1	1	1		2		3	2	2	2	2	3	
Isabella	163	12	12	9	9	7	18	16	13	11	20 35	15 47	21 39	****
lackson	447	41	22	38	46	33	53 30	33 21	24 21	36 34	40	54	50	
Kalamazoo Kalkaska	406 52	30	24	36	41 5	25 3	7	5	6	1	2	7	8	
Kent	1,049	79	62	79	107	85	100	73	62	76	124	99	103	A
Keweenaw	11	1	1		20.	1	1	2	3		1		1	
Lake	40		3	4	4	5	5	4	2	1	5	2	5	
Lapeer	246 62	18	12	16	23	15	24	8	11	22	26 5	34	36 6	
			400	-		100				100	1.5	100	1.3	
lvingston	464 182	16	31 18	48 19	41 13	31	43	24	28	37 20	41 19	41 18	58 26	
Luce	16	10	10	1	2	3		1	2	2	2	2	1	
Mackinac	58	12	5	В	7	2	5	4	2	6	5	2	2	
Macomb	243	15	18	20	26	12	17	12	13	21	29	38	22	
Manistee	192	16	12	9	23	18	24	11	19	23	12	14	11	
Marquette	306	17	22	13	23	20	27	20	27 10	40	38 10	31 13	28	
Mason	119	8	11	4	12	12	13 16	14	12	14	11	14	21	
Mecosta Menominee	161 148	6	13	14	16 20	11	16	13	13	11	10	13	11	
Midland	88	7	7	2	7	6	9	6	9	8	13	5	9	
Missaukee	47	2	4	2	6	4	6	7	1	5	1	8	6	
Monroe	302	27	18	21	21	21	31	16	20	25	39	33	30	
Montcalm	261	18	14	28	23	17	21	23	12	16	28	31	30	
	19	1	1000	2	2		4	1	1	1	2	3	2	

Counties.	Year, 1896.	Months, 1896.												
		Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk
Muskegon Newaygo Oakland Oceana Ogemaw	234 180 319 160 42	8 8 35 11 1	13 11 24 8 3	15 14 42 14 5	20 21 22 12 4	13 6 16 11 3	31 18 24 13 3	29 17 23 12 2	6 12 20 14 5	25 17 29 25 2	22 15 24 8 2	26 15 32 15 3	26 26 28 17 9	
*Ontonagon Osceola Oscoda Otsego Ottawa	36 128 18 40 305	2 7 2 24	1 9 1 2 14	1 12 5 4 19	1 14 3 5 25	7 8 1 4 36	12 12 13 35	13 1 3 24	2 8 2 1 12	3 10 1 2 24	5 11 2 6 27	5 10 2 7 32	3 14 3 33	4
Presque Isle Roscommon Saginaw Sanilac Schoolcraft	42 6 649 249 55	2 47 18 2	57 16 1	35 13 3	61 21 10	3 4 52 16 5	3 64 31 6	35 13 5	39 13 6	56 28 4	68 30 1	10 2 82 30 8	53 20 4	
Shiawassee St. Clair St. Joseph Tuscola	334 471 286 304	27 44 31 32	16 31 24 17	28 24 24 28	32 36 26 23	34 27 17 12	26 63 17 15	32 32 12 18	11 28 13 16	30 36 28 31	15 38 18 37	39 66 21 29	44 46 35 46	
Van Buren Washtenaw Wayne Wexford	288 324 2,413 136	19 31 188 6	16 18 193 11	29 21 106 13	29 23 210 9	13 27 196 15	17 39 289 16	15 23 133 12	18 25 184 6	32 34 244 16	23 30 262 8	43 29 255 13	34 24 153 11	

Table 29.—CONCLUDED.—Marriages by counties and months, 1896.

NOTE TO TABLE 29.—COLOR OF PERSONS MARRIED IN MICHIGAN, 1896.

Out of the total of 18,897 marriages returned as having occurred in Michigan during the year 1896, 18,706 were between persons white in color. There were 76 marriages of blacks, 58 of mulattoes, 55 between Indians and 2 of unknown color. The white marriages constitute 98.98 per cent of the total marriages of all colors, a preponderance so great as to render any detailed study of marriages by color in Michigan of very trivial importance. There were 22 marriages of mixed race—the same as the number recorded for the previous year. These are included in the totals, white, black, mulatto, etc., the rule being to classify the marriage according to the color of the groom. When the color is given as "half-breed" or "white and Indian," the case has been included in the number of Indian marriages.

Black marriages.—Total for State, 76. By counties:—Wayne, 23; Washtenaw, 8; Jackson, Kalamazoo, each 6; Kent, Oakland, each 5; Ingham, 4; Cass, 3; Allegan, Berrien, Calhoun, Genesee, Van Buren, each 2; Calhoun, Clinton, Lenawee, Muskegon, Oceana, Ottawa, each 1.

Mulatto marriages.—Total for State, 58. By counties:—Cass, 12; Washtenaw, Wayne, each 9; Van Buren, 5; Kalamazoo, Kent, each 4; Berrien, 3; Jackson, Mecosta, Midland, each 2; Benzie, Calhoun, Ingham, Manistee, Montcalm, Wexford, each 1.

Indian marriages.—Total for State, 55. By counties:—Baraga, 12; Mackinac, 8; Charlevoix, 7; Emmet, Leelanau, each 6; Cass, Cheboygan, Chippewa, Isabella, Mason, Oceana, each 2; Alcona, Delta, Hillsdale, Iosco, each 1.

Mixed marriages.—Total for State, 22. Two white males married Indian females, as follows:—Dickinson, Mason, each 1; Seven black males married females of other color, as follows:—White—Calhoun, Oceana, each 1; Mulatto—Calhoun, 1; Kalamazoo, Washtenaw, each 2; Six mulatto males married females of other color as follows:—Black—Calhoun, Midland, Van Buren, each 1; White—Kent, Montcalm, Wexford, each 1. Seven Indians married white females, as follows:—Mackinac, 5; Cheboygan, Hillsdale, each 1.

Unknown color.-Calhoun, 2.

^{*} Records burned in court house, Aug. 25, 1896.

MARRIAGES BY NATIVITY, 1896.

Table 30 exhibits the number and proportion of the bridegrooms and brides of each nativity married in Michigan in 1896. The per cent of native males and females continue high as compared with the years prior to the last period of "hard times," which apparently have had a more markedly restrictive action on the marriages of the foreign than of the native born. In Table 31 the distribution of marriages by general nativity may be compared since the beginning of registration by means of quinquennial periods.

Table 30.—By nativity, the number and per cent of brides and bridegrooms returned for the year 1896.

		:	Brides, 1896	Bridegrooms, 1896.		
Brides na	rooms and brides,— tivity specified.	Foreign- born.	Native- born.	Unknown.	Total of each nativity.	Per cent of each nativity.
	Foreign-born	11,551	1,510	327	13,388	70.8
Bridegrooms	Native-born	2,353	3,055	79	5,487	29.0
ı	Unknown	9	5	8	22	.1
Toulan-	Total of each nativity	13,913	4,570	414	18,897	
Brides	Per cent of each nativity	73.6	24.2	2.2		100.0

Table 31.—Nativity of marriages in Michigan for the year 1896; compared with averages for five successive quinquennial periods, 1871-95.

	Nativity of marriages,—Per cent of total.							
Years and periods averaged.	Both foreign- born.	Both native- born.	Foreign groom and native bride.	Native groom and foreign bride.	One or both unknown.			
Average, 1871-75	59.7	18.5	12.3	7.0	2.6			
Average, 1876-80	63.2	14.0	13 3	7.4	2.2			
Average, 1881-85	58.2	19.4	12 4	8.7	1.8			
Average, 1886-90	56.4	20.3	13.2	8.1	2.0			
Average, 1891-95	58.0	18.2	13.2	7.9	2.6			
Year 1895	60.5	15.7	13.2	8.1	2.5			
Year 1896	61.1	16.2	12.5	8.0	2.3			

AVERAGE AGES AT MARRIAGE BY NATIVITY, 1887-96.

The average ages of bridegrooms and brides married in Michigan are shown, by nativity, for the past ten years in Table 32. The foreign born marry somewhat later than the native born, the reason for which, no doubt, lies to some extent in the loss of time required after arrival in this country to make the necessary preparations and arrange for marriage. The same class of population would probably, normally, show a considerably lower average age at marriage than the native born. Both native and foreign born, males and females, show slightly lower average ages at marriage than those of the preceding year.

Table 32.—The average ages, by nativity and sex, of persons married in Michigan during the years 1887-96; with the mean of the average ages for the ten-year period.

Years.	All na	tivities.	Nativ	e-born.	Foreig	m-born.	Unknow	nativity.
	Males.	Females.	Males.	Females.	Males	Females.	Males.	Females.
1887	28.6	23.6	28.2	23.2	29.4	24.5	29.9	23.7
1888	29.2	24.4	28.1	23.0	29.3	24.8	30.2	25.5
1889	28.2	23.5	27.9	22.9	29.0	24.5	26.3	25.8
1890	28.9	24.3	28.1	22.8	29.3	24.6	27.0	25.6
1891	28.5	23.6	28.0	23.0	29.3	24.7	29.3	27.3
1892	28.5	23.7	28.1	23.2	29.4	24.5	28.9	27.5
1893	28.6	23.8	28.1	23.2	29.8	24.8	29.7	28.8
1894	29.5	24.5	28.9	23.9	30.9	26.0	34.9	28.0
1895	28.6	23.9	28.2	. 23.3	29.7	25.4	29.3	26.1
1896	27.8	24.2	26.7	23.6	30.4	25.6	50.0	28.6
Average, 1887-96	28.6	24.0	28.0	23.2	29.7	24.9	31.6	26.6

NATIVITY OF MARRIAGES AND PERSONS MARRIED, BY COUNTIES, 1896.

Table 33 displays the distribution of marriages of each nativity and of mixed nativities, together with a statement of those returned with the nativity of either or both parties unstated, for the entire State and for each of its counties. Also the number of persons married of each sex and of each nativity is given for each county. The data in this table may be supplemented by those given in Table 36, which gives the nationalities of the foreign born brides and bridegrooms in detail.

Table 33.—Exhibiting, for the State and counties, (a) the number of marriages, by nativity; and (b) the number of persons married, by nativity and sex, during the year 1896.

			(a) N	[arria	ges, by	nativ	ity,	1896.			(8)) Pers	ons ma		, by	
	1896.			ve	native	Femuni		Ma				ive-	Fore		kno	n- wn
State and counties.	marriages, 18	native-born.	foreign-born.	male, native	female, na	Mal	e.	F	e- le.	own.						
	Total marı	Both nativ	Both foreig	Foreign marken female.	Foreign fe male.	Native.	Foreign.	Native.	Foreign.	Both unknown.	Males.	Females.	Males.	Females.	Males.	Females.
State	18,897	11,551	3,055	2,353	1,510	327	79	9	5	8	13,388	13,913	5,487	4,570	22	41
AlconaAlgerAlleganAlpenaAntrim	42 41 330 125 106	12 10 277 34 70	15 17 14 44 10	6 5 25 27 19	9 8 10 14 6	3 2 1	1 1 4				21 18 290 50 77	18 15 302 61 89	21 23 40 75 29	24 25 24 58 16		
ArenacBaragaBarryBayBayBay	63 38 229 479 89	19 21 199 209 61	11 11 3 104 5	20 6 18 79 10	7 48 10		1 1 11 2				31 21 207 285 72	39 27 217 288 71	32 17 22 194 17	19 11 10 152 15		3
BerrienBranchCalhounCassCharlevoix	435 238 403 196 100	327 211 337 171 58	37 15 2 11	31 14 28 4 22	20 8 15 3 9	5 7 12	1	1 1 2		1 1	364 224 359 186 67		69 14 43 7 33	57 8 30 5 20	1 3	0
Cheboygan Chippewa Clare Clinton Crawford	112 172 51 229 25	40 28 26 203 9	22 100 4 4 4	23 27 13 12 10	18 16 5 7 2	1 3 2					64 45 34 212 11	39	48 127 17 17 17	40 116 9 11 6		
Delta Dickinson Eaton Emmet Genesee	154 130 305 117 357	33 15 274 83 281	69 88 3 11 8	28 14 10 16 40	21 9 12 7 26	5		i			55 26 291 90 308	285	99 104 13 27 49	90 97 15 18 34		
Gladwin Gogebic G'd Traverse Gratiot Hillsdale	51 133 144 274 256	31 17 101 229 222	3 104 7 3	10 7 18 25 6	7 5 17 7			:::	:::		38 22 119 246 249	119 254	13 111 25 28 7	10 109 24 10		1 2
Houghton Huron Ingham Ionia Ioseo	432 218 335 311 77	106 76 265 252 22	233 56 19 7 16	64 50 26 24 18	28 36 25 17 14	9	2				135 112 290 278 42	126 291 276	297 106 45 33 35	261 92 44 24 30		i
Iron Isabella Jackson Kalamazoo Kalkaska	19 163 447 406 52		10 9 27 23 1	4 16 33 30 9	16 31 16 4	1	2	 i			138 385 352 41	138 386	14 25 62 53 11	11 25 58 39 5	i	
Kent Keweenaw Lake Lapeer Leelanau	1,049 11 40 246 62	28 168	199 5 2 15 6	137 1 4 47 13	105 1 3 15 3	2	1	1		::::	710 5 33 184 43	5 32 215	338 6 7 62 19	304 6 5 30 9	1	

Table 33.—CONCLUDED.—Marriages by counties and nativity.

			(a) 1	Marria	ges, b	y nati	vity,	1896	3.		(8)) Pers	ons m	arried 1896.	l, by	
	1896.			76	native	Fem			ale ik.		Nati		Fore			n- own.
Counties.		-born.	n-born.	le, nativ	female, na	Mal	e.		e- ile.	wn.					1	
	Total marriages,	Both native-born	Both foreign-born.	Foreign male, native female.	Foreign fer male.	Native.	Foreign.	Native.	Foreign.	Both unknown.	Males.	Females.	Males.	Females.	Males.	Females.
Lenawee Livingston Luce Mackinac Macomb	464 182 16 58 243	398 154 4 25 161	10 6 6 14 26	33 8 5 13 25	18 10 6 22	1			1		420 168 5 31 190	431 162 9 38 186	43 14 11 27 53	29 16 6 20 48	1	4 4 1
Manistee Marquette Mason Mecosta Menominee	192 306 119 161 148	84 63 64 112 43	58 151 28 9 68	30 64 19 26 20	20 28 8 14 14	2	 1			 	104 91 72 126 59	114 127 83 138 63	88 215 47 35 89	78 179 36 23 82	=======================================	
Midland Missaukee Monroe Montealm Montmorency	88 47 302 261 19	55 16 255 202 7	6 15 5 16 8	14 12 22 19	13 3 16 13 3	1 4 9	2				68 20 275 224 10	69 28 277 221 8	20 27 27 27 37 9	19 18 21 29 11		11
Muskegon Newaygo Oakland Oceana Ogemaw	234 180 319 160 42	130 135 229 110 17	35 17 16 9 11	45 15 29 19 11	23 12 19 10 3	22 12	4	=		:::	154 148 270 132 20	175 150 258 129 28	80 32 49 28 22	58 29 35 19 14		1 26 12
Ontonagon Osceola Oscoda Otsego Ottawa	36 128 18 40 305	12 68 14 15 183	9 10 7 42	7 23 2 5 48	12 2 2 2 31	10 8	4 3 1	i		*5	15 90 16 25 214	19 92 16 20 231	16 37 2 15 91	11 22 2 9 73	5	11
Presque Isle Roscommon Saginaw Sanilae Schoolcraft	42 6 649 249 55	351 106 16	96 54 22	18 1 111 46 5	5 1 74 32 9	11	1 3 5		3		19 4 436 144 28	32 4 462 152 21	23 2 210 105 27	10 1 173 86 31	3	1 14 11 3
Shiawasse St. Clair St. Joseph Tuscola	334 471 266 304	248 220 242 189	15 101 5 26	32 74 11 51	27 70 8 30		1 2 2	i		i	286 293 250 224	280 294 253 241	48 177 16 79	. 171 13 56	i	12
Van Buren Washtenaw Wayne Wexford	288 324 2,413 136	249 230 1,021 86	5 18 753 16	17 32 373 18	8 19 265 9	21	1 3 2		i		265 270 1,287 100	266 262 1,394 104	23 53 1,126 36	13 38 1,018 25	i	24

^{*}Four of these records destroyed by fire.

MARRIAGES BY NATIONALITY, 1896.

Tables 34, 35 and 36 relate to nationality of persons married in Michigan during the year 1896. These tables are of the same form as Tables 13, 15 and 16 of Part II, which exhibit the corresponding facts in regard to births. By comparing these two groups of tables the fecundity of marriages of different nationalities or combinations of nationalities may be compared as in Table 14, Part II.

Table 34 is arranged so that the number of persons of each nationality married in Michigan during the year 1896 can be compared with the estimated population of corresponding nationality. There is less variation between the rates for different countries than in the table of corresponding form for births (Table 15, Part II). Some allowance should be made for age distribution of the persons born in each country, as, for example, that of the natives of the United States, which includes a large number of children below the marriageable age. On the other hand, many foreign born immigrants are married before coming to this country, so that their rates are not as high as they otherwise would appear. The corresponding rates for the years 1894–95 are presented for comparison. The distribution of the persons of foreign birth married in the State during the year is given in Table 36.

Table 34.—Number of persons married of each nationality in Michigan during the year 1896, with rates per 1,000 estimated population of like nationality; also corresponding rates for 1894-95.

Country of birth.	Estimated population, 1896.	Persons married, 1896.	Marriage rate per 1,000 inhabitants of same nationality, 1896.	Marriage rate per 1,000 inhabitants of same nationality, 1895.	Marriage rate per 1,000 inhabitants of same nationality, 1894.
All nationalities	2,315,517	37,794	16.3	16.6	16.8
United States	1,731,174	27,301	15.8	16.0	15.6
Canada	209,963	3,860	18.4	19.5	19.1
England and Wales	45,910	698	15.2	16.4	15.8
Scotland	11,739	129	11.0	11.7	8.8
Ireland	33,299	225	6.8	7.6	8.9
Germany	146,831	2,422	, 16.5	16.5	16.1
Austria	5,157	187	36.3	26.5	26.0
Holland	34,598	569	16.4	17.5	17.4
Belgium	3,210	54	16.8	16.1	14.6
Switzerland	3,287	46	14.0	15.2	18.4
Norway	8,363	169	20.2	19.4	22.5
Sweden	28,613	583	20.4	17.8	22.6
Denmark	7,841	123	15.7	14.8	21.0
Russia (including Finland)	18,284	588	32.2	27.4	34.9
Poland	15,214	171	11.2	11.8	8.1
Hungary	345	7	20.3	25.5	13.7
Bohemia	2,981	22	7.4	10.5	10.2
France	1,663	36	21.6	13.3	8.4
Italy	3,551	106	29.9	19.9	17.7
All others	3,486	62	17.8	16.1	20.0
Unknown		436			

Table 35 shows, by a cross-arrangement, the number of males of the most important nationalities returned as having married females of the same or other nationalities in Michigan during the year 1896. Taking as an example the first horizontal line, it appears that 11,551 males born in the United States married females of the same nationality; 848 native born males married Canadian females; 120 married females born in England or Wales; 29 married Scotch; 41 Irish; 323 German, etc. The total number of native born males married, as shown in the

Table 35.—Intermarriages by

									1	emales
Males born in—	United States.	Can- ada.	England and Wales.	Scot- land.	Ire- land.	Ger- many.	Aus- tria.	Hol- land.	Bel- gium.	Switz- erland.
United States	11,551	848	120	29	41	323	2	68	2	7
Canada	1,170	764	29	12	15	23	 	1		4
England and Wales	262	61	83	3	3	10				1
Scotland	46	18	.8	4	2					
Ireland	76	19	7	1	25	2		1		
Germany	467	39	5	2	3	713	8	3		6
Austria	8	1				7	77			
Holland	99	3	1			12		188	1	
Belgium	12				 -	2		1	18	
Switzerland	11					7	1			4
Norway	24					1				
Sweden	65	8	2		2	1		1		
Denmark	33	1				2				
Russia	8					15				
-Finland	7				 - 	1				
Poland	13					23				
Hungary	3									
Bohemia										
France	17	7	2			2				
Italy	11	2				3				1
All others	21					1				
Unknown	9	3	1							
Total females	13,913	1,774	258	51	91	1,148	88	263	21	23
Per cent	73.6	9.4	1.4	.3	.5	6.1	.5	1.4	.1	1

last column on the right, was 13,388, upon which basis the percentage married to each nationality shown in the table may be computed. In like manner, taking the first vertical column, the manner in which the 13,913 females born in the United States and married in Michigan during the year intermarried with other nationalities may be seen. The same facts may be examined for each of the foreign nationalities stated in the left-hand column, by tracing the figures to the right as they intersect the corresponding list of nationalities of females given at the top of the table.

nationality in Michigan, 1896.

born	in—												1
Nor- way.	Swe- den.	Den- mark.	Rus-	Fin- land.	Po- land.	Hun- gary.	Bohe- mia.	France.	Italy.	All others.	Unk.	Total males.	Per cent.
10	22	12	2	4	5		1	4	2	8	327	13,388	70.8
4	5	3						3		2	51	2,086	11.0
1	2		1		1					1	11	440	2.5
												78	-,4
											3	134	.5
1	1		9		6					1	10	1,274	6.7
			1		3				1	1		99	.5
										1	1	306	1.6
					*****							33	.5
												23	- 1
44	11	4		6								90	
10	209	2		17							1	318	1.7
4	2	29					1				1	73	.4
			34	1								58	.3
4	12			215								239	1.8
			1	,,,,,,	59							96	.5
						2					,	5	
							10					10	.1
											1	29	.2
					****				43			60	.3
1	1				1					11		36	,2
										1	8	22	,1
79	265	50	48	243	75	2	12	7	46	26	414	18,897	
.4	1.4	.3	.3	1.3	.4		.1		,2	.1	2.2		100.0

Table 36.—Exhibiting, for the State and counties, the nationalities of foreign born persons married in Michigan during the year 1896.

State and counties.	Sex.	Total foreign born persons married, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All oth- ers.*
State	Total Males Females	10,057 5,487 4,570	3,860 2,086 1,774	827 518 309	225 134 91	2,609 1,373 1,236	569 306 263	875 481 394	588 297 291	171 96 75	333 196 137
Alcona	Total Males Females	45 21 24	36 16 20	3 2 1		3 1 2		3 2 1			
Alger	Total Males Females	48 23 25	31 12 19	2 2		3 3		7 4 3	5 2 3		
Allegan	Total Males Females	64 40 24	13 5 8	8 6 2		20 13 7	13 9 4	9 6 3			1 1
Alpena	Total Males Females	133 75 58	87 50 37	4 2 2 2	1 1	30 15 15		10 6 4			1
Antrim	Total Males Females	45 29 16	31 19 12	3 3	1	3 2 1	1	5 3 2			1 1
Arenac	Total Males Females	51 32 19	41 27 14	3 1 2	1	6 3 3					
Baraga	Total Males Females	28 17 11	5 4 1	1	1 1	2 1 1		11 6 5	8 4 4		
Barry	Total Males Females	32 22 10	11 9 2	8 5 3	1 1	6 3 3	4 2 2	2 2			
Вау	Total Males Females	346 194 152	178 102 76	17 12 5	4	10 6 55 51	3 2 1	10 6 4	17 8 9	6 4 2	5 5
Benzie	Total Males Females	32 17 15	20 11 9			1 1		11 6 5			
Berrien	Total Males Females	126 69 57	27 15 12	6 3 3	5 3 2	61 32 29	2 1 1	6 5 1	13 5 8	1	5 4 1
Branch	Total Males Females	22 14 8	6 3 3	6 5 1	1 1	8 4 4					1 1
Calhoun	Total Males Females	73 43 30	25 19 6	11 7 4	5 3 2	25 9 16	1	1 1-			5- 4- 1
Cass	Total Males Females	12 7 5	3 2 1	1	2 2	5 2 3		1 1			
Charlevoix	Total Males Females	53 33 20	30 15 15	7 6 1	4	6 4 2	2 1 1	2 2			2 1 1
Cheboygan	Total Males Females	88 48 40	59 35 24	3 1 2	1 1	14 6 8		11 6 5			

^{*} Includes Belgium, Switzerland. Hungary, Bohemia, France and Italy in addition to the countries included under this title in Table 34.

Table 36.—Continued.—Nationalities of foreign born persons married in Michigan, 1896.

				1030.							
Counties.	Sex.	Total foreign born persons married, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All oth- ers.
Chippewa	Total Males Females	243 127 116	194 96 98	22 14 8	5 3 2	9 6 3		3 2 1	9 5 4		1 1
Clare	Total Males Females	26 17 9	25 16 9			1 1					
Clinton	Total Males Females	28 17 11	15 8 7	2 1 1	3 2 1	8 6 2					
Crawford	Total Males Females	20 14 6	7 5 2	2 2		1 1		8 4 4			2 2
Delta	Total Males Females	189 99 90	74 41 33	3 2 1	4 1 3	14 7 7		70 37 33	20 9 11		4 2 2
Dickinson	Total Males Females	201 104 97	22 12 10	17 10 7	1 1	36. 18 18	1	69 34 35	23 12 11		32 17 15
Eaton	Total Males Females	28 13 15	12 6 6	7 2 5		8 4 4			1 1		
Emmet	Total Males Females	45 27 18	21 15 6	2 2	2 1 1	13 7 6		6 3 3			1 1
Genesee	Total Males Females	83 49 34	54 31 23	10 5 5	1 1	15 10 5	1				2 1 1
Gladwin	Total Males Females	23 13 10	18 11 7	2 1 1		1 1		2 1 1			
Gogebic	Total Males Females	220 111 109	6 4 2	16 8 8		32 14 18		60 33 27	97 48 49	3 1 2	6 3 3
G'd Traverse	Total Males Females	49 25 24	25 13 12	6 3 3	2 1 1	9 3 6	1 1	4 3 1	1 1		1 <u>1</u>
Gratiot	Total Males Females	38 28 10	30 23 7			3 1 .2		1 1	1		3 2 1
Hillsdale	Total Males Females	7 7		6 6				1 1			
Houghton	Total Males Females	558 297 261	97 55 42	69 43 26	14 6 8	84 43 41		67 34 33	163 82 81	14 7 7	50 27 23
Huron	Total Males Females	198 106 92	140 74 66	5 3 2	2 2	45 25 20		1 1	1 1	1	3 2 1
Ingham	Total Males Females	89 45 44	27 13 14	10 6 4	4 3 1	43 20 23		. 1 . 1	2 1 1		2 1 1
Ionia	Total Males Females	57 38 24	26 13 13	7 6 1	2 2	16 9 7		2 1 1		3 1 2	1 1

Table 36.—Continued.—Nationalities of foreign born persons married in Michigan, 1896.

				1090.							
Counties.	Sex.	Total foreign born persons married, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
Iosco	Total Males Females	65 35 30	38 21 17	4 1 3	1 1	9 5 4		8 5 3	5 2 3		
Iron	Total Males Females	25 14 11	4 8 1	1 1		5 2 3		, 3	8 4 4	3 2 1	
Isabella	Total Males Females	50 25 25	43 20 23	2 1 1	2 2	2 1 1		1			
Jackson	Total Males Females	120 62 58	32 12 20	38 22 16	5 2 3	29 16 13	2 2	4 2 2		6 3 3	4 3 1
Kalamazoo	Total Males Females	92 53 39	12 9 3	13 7 6	3 2 1	16 11 5	42 20 22	2 1 1	2 1 1		2 2
Kalkaska	Total Males Females	16 11 5	8 4 4.	4	1			3 2 1			
Kent	Total Males Females	642 338 304	107 53 54	33 16 17	24 15 9	97 52 45	302 159 143	45 24 21	3 1 2	21 10 11	10 8 2
Keweenaw	Total Males Females	12 6 6						5 2 3	7 4 3		
Lake	Total Males Females	12 7 5	8 5 3			1		2 1 1			1 1
Lapeer	Total Males Females	92 62 30	67 43 24	12 10 2	3 2 1	8 6 2					2 1 1
Leelanau	Total Males Females	28 19 9	5 4 1			3 2 1	1 1	14 8 6		3 3	2 1 1
Lenawee	Total Males Females	72 43 29	15 7 8	14 10 4	4 3 1	38 23 15					1 1
Livingston	Total Males Females	30 14 16	8 5 3	4 2 2	3 1 2	13 5 8		1 1			1 1
Luce	Total Males Females	17 11 6	11 7 4	2 2					4 2 2		
Mackinac	Total Males Females	47 ·27 20	30 16 14	3 1 2	2 2	3 2 1		3 2 1	3 1 2		3 3
Macomb	Total Males Females	101 53 48	36 15 21	8 5 3	1 1	54 32 22					2 1 1
Manistee	Total Males Females	166 88 78	22 11 11	7 4 3		49 29 20		43 22 21	4 2 2	40 19 21	1 1
Marquette	Total Males Females	394 215 179	73 42 81	71 43 28	5 5	24 12 12		111 54 57	102 53 49		8 6 2

Table 36.—Continued.—Nationalities of foreign born persons married in Michigan, 1896.

				1090.							
Counties.	Sex.	Total foreign born persons married, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
Mason	Total Males Females	83 47 36	29 18 11	5 4 1		17 9 8		26 12 14	2 1 1	3 2 1	1 1
Mecosta	Total Males Females	58 35 23	38 24 14	6 4 2		6 2 4	<u>1</u>	7 5 2			
Menominee	Total Males Females	171 89 82	69 35 34	1 1		41 19 22	. 2 1 1	35 20 15	4 2 2	1	18 10 8
Midland	Total Males Females	39 20 19	27 16 11	5 1 4		7 3 4					
Missaukee	Total Males Females	45 27 18	18 12 6	1 1		4 3 1	15 8 7	7 4 3			
Monroe	Total Males Females	48 27 21	9 3 6	6 4 2		25 15 10		1 1		1 1	6 3 3
Montcalm	Total Males Females	66 37 29	26 15 11	3 2 1		10 5 5		27 15 12			
Montmorency.	Males Females	20 9 11	14 5 9		1 1	1 1		2 2			2 1 1
Muskegon	Total Males Females	138 80 58	34 17 17	7 7	4 2 2	19 13 6	41 23 18	27 16 11	4 2 2		2
Newaygo	Total Males Females	61 33 29	19 8 11	3 2 1	1 1	14 6 8	7 6 1	11 7 4	6 3 3		
Oakland	Total Males Females	84 49 35	43 25 18	15 6 9	3 2 1	20 14 6		1 1			2 1 1
Oceana	Total Males Females	47 28 19	20 11 9	5 4 1		8 5 3	2 1 1	8 4 4			4 3 1
Ogemaw	Total Males Females	36 22 14	31 19 12	3 2 1		2 1 1					
Ontonagon	Total Males Females	27 16 11	10 7 3	1	1			4 2 2	9 4 5	2 1 1	
Osceola	Total Males Females	59 37 22	34 22 12	3 3	1	10 5 5		11 6 5			
Oscoda	Total Males Females	4 2 2	3 2 1			<u>1</u>					
Otsego	Total Males Females	24 15 9	12 9 3			8 2 6			3 3		1
Ottawa	Total Males Females	164 91 73	16 11 5	6 4 2		17 10 7	118 62 56	1 1			6 3 3

Table 36.—CONCLUDED.—Nationalities of foreign born persons married in Michigan, 1896.

				1000.							
Counties.	Sex.	Total foreign born persons married, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land	All oth- ers.
Presque Isle	Total Males Females	33 23 10	9 6 3	1 1		20 14 6			1 1	2 1 1	
Roscommon	Total Males Females	3 2 1	2 1 1	1 1							
Saginaw	Total Males Females	383 210 173	176 95 81	28 20 8	5 4 1	132 66 66		4 3 1	8 4 4	15 9 6	15 9 6
Sanilac	Total Males Females	191 105 86	163 88 75	8 8	2 1 1	17 7 10		1 1			
Schoolcraft	Total Males Females	58 27 31	20 8 12	1 1		10 5 5		17 9 8	9 4 5		1 1
Shiawassee	Total Males Females	90 48 42	41 23 18	16 11 5	2 1 1	26 11 15	1 1	1 1			3 1 2
St. Clair	Males Females	348 177 171	284 141 143	19 14 5	9 4 5	28 14 14		7 4 3			1 1
St. Joseph	Total Males Females	29 16 13	3 2 1	5 3 2		19 10 9					2 1 1
Tuscola	Total Males Females	135 79 56	112 66 46	7 4 3	11	13 9 4					2 2
Van Buren	Total Males Females	36 23 13	8 7 1	15 9 6	11	8 4 4	2 1 1		1 1		1 1
Washtenaw	Total Males Females	91 53 38	22 11 11	13 10 3	5 3 2	45 24 21		1 1			5 4 1
Wayne	Total Males Females	2,144 1,126 1,018	625 303 322	155 93 62	68 41 27	1,092 569 523	4 3 1	17 12 5	42 22 20	46 30 16	95 53 42
Wexford	Total Males Females	61 36 25	28 19 9	3 1 2		1 1		29 15 14			

MARRIAGES BY PERIODS OF AGE AND CIVIL CONDITION, 1896.

Table 37, showing the arrangement of marriages according to the periods of age of the contracting parties by civil condition, may require a word of explanation as to manner of reading. Taking the first part as an illustration, and reading down the vertical columns, beginning with the left upper corner, we see that 288 females under 20 years of age married males under 20; 3,226 females under 20 married males aged from 20 to 24 years, etc. The total number of females married under 20 years of age was 5,496, which number was 29.1 per cent of all females married. The corresponding facts in regard to males of each age may be noted by reading the horizontal lines of the table. The largest number of marriages took place between males aged from 20 to 24 and females of the same period of age.

The second part of the table showing the distribution of first marriages includes a total of 14,863 couples, or 78.7 per cent of the total number of marriages during the year. Although including so large a proportion of marriages, the distribution by ages is seen to be much narrower, the marriages massing in the early age periods. For this reason the tables formerly given in these Reports (corresponding to the first part of the present Table 37) were not at all representative of the mode of union, by ages, of by far the most important constituent of the Michigan marriage rate, namely, couples in which both bride and groom were married for the first time. The same difference is brought out forcibly on comparing the percentages married at each age period in the two parts of the table. The proportion of males married between the ages of 20 and 24 rises from 37.2 per cent, representing all civil conditions, to 45.6 per cent for first marriages; for females it rises from 40.7 per cent for all civil conditions at the period, 20 to 24, to 46.2 per cent for the first marriages at the same period of age.

More bachelors, aged from 25 to 29 years, married widows than at any other period of age (32.5 per cent); the widows wedded by them were also more numerous at the same age period (28.1 per cent). The largest percentage of widowers who married spinsters (23.5 per cent) was at the years 30 to 34; their brides were about 10 years younger for the most part (33.3 per cent aged 20 to 24 years).

Table 37.—Marriages in Michigan during the year 1896, by periods of age and civil condition of persons married; showing also the number and percentage of each sex married at each period of age.

					An	788 (of fe	mal	ng 1	896						-	
Ages of males, 1896.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk.	Total males.	Per cent of males at each age.
Under 20	288	53	4	1												346	1.8
20 to 24	3,226	3,446	319	25	6	2	1		1						3	7,029	37.2
25 to 29	1,514	2,823	1,317	177	41	3	4	1			1				1	5,882	31.1
30 to 34	296	866	685	323	82	19	5	1			1				1	2,279	12.1
35 to 39	110	333	330	235	165	47	14	1	1		1				1	1,238	6.6
40 to 44	29	95	118	113	128	98	26	4	3		1					615	3.3
45 to 49	22	36	75	90	114	76	65	20	6	:3	,				1	508	2.7
50 to 54	4	21	18	39	64	51	60	60	13	8		1				339	1.8
55 to 59	6	7	10	12	26	39	50	47	26	9	4				1	237	1.3
60 to 64		2	4	5	11	18	33	31	30	30	3	5.0				167	.9
65 to 69	1	2	3	1	6	11	21	28	21	24	20	3		1		142	.8
70 to 74			1	1		- 5	8	7	17	8	8	6	1			62	,3
75 to 79					1	1	2	3	3	10	7	3	1			31	.2
80 and over		1					1	1	2	1	1	3	2	1		13	.1
Unknown												22			.9	9	
Total females.	5,496	7,685	2,884	1022	644	370	290	204	123	93	47	16	4	2	17	18,897	
Per cent	29.1	40.7	15.3	5.4	3.4	2.0	1.5	1.1	.7	.5	.2	.1			.1		100.0

I.—Aggregate of all civil conditions.

Table 37.—CONTINUED.—Marriages in Michigan, 1896, by periods of age of persons married.

II.-First marriage of both parties.

Under 20	288	51	1											 	340	2.3
20 to 24	3,189	3,311	262	12	1				1				-	 2	6,778	45.6
25 to 29	1,381	2,601	1,122	100	11									 1	5,216	35.1
30 to 34	217	659	506	175	24	5	3	1	٤					 	1,590	10.7
35 to 39	58	200	185	107	53	7	1		1					 1	613	4.1
40 to 44	13	38	39	33	30	21	2							 	176	1.2
45 to 49	8	8	17	14	9	12	3	3						 	74	.5
50 to 54	3	3	3	4	15	1	4	4				,		 	37	.3
55 to 59	2	1	1	****	3	2	4	1				****		 1	15	.1
60 to 64						2	1			1		Z		 	4	
65 to 69						2	4				1		****	 	7	
70 to 74			1				. 1	1						 	3	
75 to 79										1	1			 	2	
Unknown										***				 8	8	.1
Total females.	5,159	6,872	2,137	445	146	52	23	10	2	2	2			 13	14,863	
Per cent	34.7	46.2	14.4	3.0	1.0	.3	.2	.1						 .1		100.0

III.—First marriage of male; second or subsequent marriage of female.

					Ag	es o	f fe	male	es, 1	896.							Per
Ages of males, 1896.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69,	70 to 74	75 to 79.	80 +	Unk.	Total males.	cent of males at each age.
Under 20		1	3	1											,	5	.5
20 to 24	10	86	49	12	4	2	1									164	17.7
25 to 29	12	81	119	59	23	2	4	1						4.4		301	32.5
30 to 34	1	27	52	59	31	9					1		****	****		180	19.5
35 to 39		6	22	38	42	21	8				1					138	14.9
40 to 44		2	10	14	18	18	8	1								71	7.7
45 to 49		1	3	3	7	10	6	3	1	1					1	36	3.9
50 to 54		ì	1		3		. 1	8				1				15	1.6
55 to 59				1		2	3		2		1					9	10
60 to 64			1				1	1								3	.3
65 to 69							1			1						2	.2
70 to 74										1						1	.1
Total females.	23	205	260	187	128	64	33	14	3	3	3	1	****		1	925	
Per cent	2.5	22.2	28.1	20.2	13.8	6.9	3.6	1.5	.3	.3	.3	.1			.1		100.0

Table 37.—CONCLUDED.—Marriages in Michigan, 1896, by periods of age of persons married.

IV.—Second or subsequent marriage of male; first marriage of female.

Under 20		1											 		1	.1
20 to 24	24	36	7										 	1	68	4.4
25 to 29	117	132	47	9	2	****					****		 		307	19.8
30 to 34	75	155	86	38	9	1							 	1	365	23.5
35 to 39	52	107	81	43	27	5							 		315	20,3
40 to 44	15	47	47	27	18	14	1						 		169	10,9
45 to 49	13	16	34	33	32	10	7	2					 		147	9.4
50 to 54	1	14	13	16	18	13	4	3	1				 		83	5.3
55 to 59	4	5	4	5	10	6	3	5	2				 		44	2.8
60 to 64		2	2	4	4	8	3	3		1			 		27	1.7
65 to 69	1	1	1	1	4	1	2	2					 		13	.8
70 to 74				1		2	1	1	1	1		1	 		8	.5
75 to 79									1	2			 		3	.2
80 and over		1					·				2		 		1	.1
Unknown													 	1	1	.1
Total females.	302	517	322	177	124	60	21	16	5	4		1	 	3	1,552	
Per cent	19.5	33.3	20.7	11.4	8.0	3.9	1.4	1.0	.3	.3		,1	 	.2		100.0

V.—Second or subsequent marriage of both parties.

					Ag	es o	f fe	male	es, 1	896.						-,7	Per
Ages of males, 1896.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79,	80 +	Unk.	Total males,	males ateach age.
Under 20															٥		
20 to 24	3	13	1	1	1											19	1.2
25 to 29	4	9	29	9	5	1					1			***		58	3.7
30 to 34	3	25	41	51	18	4	2									144	9.2
35 to 39		20	42	47	43	14	5	1								172	11.0
40 to 44	1	8	* 22	39	62	45	15	3	3		1					199	12.8
45 to 49	1	11	21	40	66	44	49	12	5	2		-				251	16.1
50 to 54		3	1	19	28	37	48	48	15	5		,				204	13.1
55 to 59		1	5	6	13	29	40	41	22	9	3					169	10.9
60 to 64			1	1	7	8	28	27	30	28	3					133	8.5
65 to 69		1	2		2	8	17	23	18	26	19	3		1		120	7.7
70 to 74						3	6	5	16	6	8	5	1			50	3.2
75 to 79					1	1	2	3	2	7	6	3	1			26	1.7
80 and over		*****		****			t	1	2	1	1	3	2	.1		12	.8
Total females.	12	91	165	213	246	194	213	164	113	84	42	14	4	2		1,557	******
Per cent	.8	5.8	10.6	13.7	15.8	12.5	13.7	10.5	7.3	5.4	2.7	.9	.3	.1			100.0

NUMBER OF TIMES MARRIED.

In connection with Table 37, Table 38 showing in cross-arrangement the number of persons of each sex married for the first, second, third time, etc., is presented. Of the 18,897 males married in 1896, 15,788 or 83.5 per cent, were married for the first time; 16,415 females, 86.9 of the total number, were married for the first time. One man had been married six times and one five times before their marriages in 1896. Three women had been married four times before their marriages in 1896.

Table 38.—Distinguishing, by sex, the number of first marriages, second marriages, etc., performed in Michigan during the year 1896.

		Times n	arried,	females.		Total	Per
Times married,—males.	First.	Second.	Third.	Fourth.	Fifth.	males.	cent.
First marriage	14,863	887	35	. 1	2	15,788	83.5
Second marriage	1,449	1,161	127	10		2,747	14.5
Third marriage	95	164	56	4		319	1.7
Fourth marriage	8	23	. 6			37	.2
Fifth marriage		2	2			4	
Sixth marriage		1				1	
Seventh marriage					1	1	
Total females	16,415	2,238	226	15	8	18,897	
Per cent	86.9	11.8	1.2	.1			100.0

Table 39.—Persons married in Michigan under the legal ages, 1887-96.

Years.	Total males under	Ages of under 1	f males 8 years.	Total females under	Age	s of fer 16 ye	nales ur ears.	ıder
•	legal age.	16.	17.	legal age.	12.	13.	14.	15.
1887	6	1	5	97		2	19	76
1888				26	•	. 	5	21
1889				19	1			18
1890				12			2	10
1891	2	1	1	10		1		9
1892	1		1	11			1	10
1893	2	. 1	1	12			. 2	10
1894	1		1	9		 -	1	8
1895	4	2	2	8			1	7
1896				3				3
Total ten years, 1887-96	2	1	1	21			3	17

PERSONS MARRIED UNDER THE LEGAL AGES, 1896.

Only 3 females were returned as having been married under the legal ages during the year 1896 in Michigan. This is the best showing that has ever been given in these Reports. Much of the credit for the same is due to the statement of age required to be made to the county clerk previous to the issue of a license to marry under the present law, and while it cannot be unquestionably asserted that the law is never evaded by means of incorrect statements of age, it is true without doubt that the number of persons annually married below the legal ages has markedly decreased within the last few years. Prior to 1887 upwards of a hundred females were annually returned as having been married under the age of sixteen years, although then as now severe penalties were contained in the statutes for the punishment of any person solemnizing such marriages.

EFFECT OF LAW REQUIRING PARENTAL CONSENT TO CERTAIN MARRIAGES.

On August 30, 1895, the law requiring the written consent of one parent or of the legal guardian, if any, to the marriage of any female under the age of 18 years went into effect. In Table 40 are given certain data suggestive of the probable changes in marriage ages resulting from the new law. The total number of girls married in 1894, the year before the law went into effect, at the ages of 16, 17 and 18, was 3,802. For 1895, including five months of required parental consent, the total number of girls married at those ages was almost identical, viz., 3,819. The distribution in the latter year, however, was quite different, the ages 16 and 17 having lost while the age 18 gained in number. This is quite what might have been expected under the law, which tends to defer marriage until the eighteenth year. The figures for 1896 are quite similar, showing a very marked diminution in the numbers married at ages 16 and 17. The total number married under 18 years of age was 3,565. This is the first complete year under the operation of this law.

Table 40.—Showing number of females married in Michigan at each year of age under 20 during the years 1894-96.

Years.			'Ages i	n years.		
I cars.	14.*	15.*	16.†	17.†	18.	19.
1894	1	8.	710	1,076	2,016	1,858
1895	1	7	654	1,020	2,145	1,897
1896		3	55 0 ·	770	2,242	. 1,864

^{*} Marriages of females at these ages were illegal.

+ Beginning August 30, 1895, the written consent of one of the parents or of the guardian is required to be filed in the office of the county clerk prior to the issue of a license to marry to a female under eighteen years of age.

MARRIAGES BY PERIODS OF AGE, 1871-96.

In Tables 41 and 42, the distribution of the persons of each sex married in 1896, by five-year periods of age, as shown in Table 37, preceding, is compared with the quinquennial averages since the beginning of registration. The changes in the selection of marriage ages are more marked in the females than in the males, although both show higher per cents at advanced ages than in the early years of registration. Thus, comparing 1896 with the average of the five years, 1871-75, 37.2 per cent of all males married in the latter year between the ages of 20 and 24 years, against 41.2 per cent in the former period. Of all females married, 36.9 per cent were married under 20 years of age in 1871-75, as compared with only 29.1 per cent at that period in 1896; above 20 years, the periods frequently show increased percentages for 1895.

Table 43 shows the distribution of persons married, by periods of age, through the counties of the State during the year 1896.

Table 41.—Percentage of males married in Michigan, at specified periods of age, for the years 1895-96; compared with averages for five quinquennial periods.

The state of the state of		-	Age	s of m	ales, b	y perio	ods of	years	, ma	rried	1 187	1-96.			
Years and periods averaged.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 . to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk
Average, 1871-75	2.6	41.2	29.5	10.6	5.5	8.8	2.3	1.7	1.0	.8	.5	.3	,1		.6
Average, 1876-80	2.6	40.8	29.8	10.8	5.6	3.2	2.2	1.6	1.1	.8	:5	.3	.1		.5
Average, 1881-85	2.3	39.5	30.7	11.4	5.7	3.2	2.2	1.6	1.0	.9	.5	.3	,1		.4
Average, 1886-90	2.1	37.7	32.4	12.2	5.7	3.0	2.4	1.5	1.1	.8	.6	.3	.1		.1
Average, 1891-95	1.9	38.1	30.8	12.7	6.0	3.2	2.3	1.7	1.2	.9	.7	.3	.1		
Year 1895	1.9	37.2	31.2	12.9	6.2	3.0	2.3	1.9	1.2	.9	.7	.3	.1		
Year 1896	1.8	37.2	31.1	12.1	6.6	3.3	2.7	1.8	1.3	.9	.8	.3	.2	.1	

Table 42.—Percentage of females married in Michigan, at specified periods of age, for the years 1895–96; compared with averages for five quinquennial periods.

			Ages o	of fem	ales, 1	by per	iods o	f yea	rs, r	narr	ied	1871-	96,		
Years and periods averaged.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unk
Average, 1871-75	36.9	36.5	12.7	5.0	3.0	2.0	1.3	.8	.5	.8	.2				.9
Average, 1876-80	37.4	37.4	11.7	4.7	3.1	1.9,	1.3	.8	.5	.3	.2				1
Average, 1881-85	33.8	38.7	13.7	4.9	3.1	1.9	1.3	.8	.5	.3	.2	.1			.6
Average, 1886-90	32.8	39.5	14.2	5.2	2.9	1.9	1.3	.9	.6	.4	.2	.1			.2
Average, 1891-95	30.8	40.6	14.3	5.3	3.1	2.0	1.4	1.0	.6	.5	.2	.1			
Year 1895	30.2	40.6	15.1	5.1	3.0	2.0	1.4	1.1	.6	.5	.2	.1			
Year 1896	29.1	40.7	15.3	5.4	3.4	2.0	1.5	1.1	.7	.5	.2	.1			.:

Table 43.—Exhibiting, for the State and counties, the number of persons married, by sex and periods of age, during the year 1896.

				Numb	er of	per	sons	mai	rried	, by	peri	ods	of a	re. 1	896.	-	_
State and counties.	Total mar- riages, 1896.	Sex.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80	Unk.
State	18,897	Total Males Females	5,842 346 5,496		5882	2279	1238	985 615 370	798 508 290	543 339 204	360 237 123	260 167 93	189 142 47	78 62 16	31	15 13 2	9
Alcona	42	Total Males Females	19 1 18	11	18 15 3	10 9 1		1	2 1 1	2	1	1		:::	==	-	-
Alger	41	Total Males Females	18	24 13 11	21 15 6	10 5 5	4	3 2 1	1	1	=	•	=	:::			
Allegan	330	Males Females	19	237 117 120	156 110 46	56 34 22	15	24 15 9	12 6 6	10 7 3	3 1 2	5 3 2		4			
Alpena	125	Total Males Females	52 2 50	41	48 32 16	33 28 5	6	12 7 5	6 4 2	5 3 2	1	1				-	
Antrim	106	Males Females	46 1 45	38	41 29 12	23 16 7	17 11 6	7 5 2		5 4 1	1	::::	=		==	100	
Arenac	63	Males	31 1 30	41 24 17	20 14 6	12 8 4	6	3		4 2 2	. 1 i	2 1 1	1			0	1
Baraga	38	Males	13	14	14 10 4	7 5 2	7 4 3	5 3 2		1		2 1 1					
Barry	229	Males	72 7 65	86	114 70 44	36 23 13	17	5 3 2		12 6 6	6 3 3	3	2				
Вау	479	Males	147 7 140	412 190 222	150	- 71 56 15	41 25	20 11 9	17	15 11 4	6 2 4	7 4 3	3			1-:	J.,
Benzie	89	Total Males Females	37 4 33	59 27 32	42 31 11	15 13 2	7	3 2 1	1 ;	5 3 2	1		2 1				
Berrien	435	Males	126 10 116	159	139	72 43 29	36		20 12 8	16 10 6	8 4	1	4		1		2
Branch	238	Total Males	80 8 72	95		39 27 12	13		9 8 1	6 4 2	10 5 5	5	2	1			
Calhoun	403	Males	123 15 108	131	181 124 57	76 48 28	26		12	20 13 7	12 10 2	6	4				,
Cass	196	Total Males Females	71 4 67	138 75 63		31 19 12		12 6 6	9	19 15 4	2						
Charlevoix	100	Total Males Females	33	36		20 14 6	15 12	4	6 3	7 3 4	5 3 9	2	1	2		0.	1
Cheboygan	112	Total Males Females	11	44	52 36 16	16 13 3	11	2 1 1	2 2	1	1	2	1	1			
Chippewa	172	Total	39 1 38	44	100 71 29	39 26 13	18	5 2	8 6	1	2 2		1				

· VITAL STATISTICS OF MICHIGAN, 1896

Table 43.—CONTINUED.—Number of persons married, by sex and periods of age.

	Total		1	Numb	er of	per	sons	maı	ried	, by	peri	ods	of a	ge, 1	896.		
Counties.	mar- riages, 1896.	Sex.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80	
Clare	51	Total Males Females	22 22	41 22 19	19 15 4	9 7 2	2 1 1	2 2	3 2 1		3112		1	==			
Clinton	229	Total Males Females	71 3 68	186 93 93	102 73 29	38 28 15	21 10 11	8 4 4	7 4 3	9 6 3			3	2 2			
Crawford	25	Total Males Females	9 1 8	26 13 13	11 8 3	1	1		:::	1 i		::::	1				-
Delta	154	Total Males Females	41 1 40	106 44 62	88 58 30	34 25 9	14 11 3	14 8 6	4 2 2	4 3 1		1					
Dickinson	130	Total Males Females	. 39	93 44 49	66 39 27	41 32 9	16 14 2	22	i	1 i	1	:::		===			-
Eaton	306	Total	120 13 107	227 127 100	117 71 46	32 24 8	27 19 8	26 12 14	25 17 8	13 5 8	9	3		2 2		1	
Emmet	117	Total Males Females	35 2 33	88 41 47	48 35 13	23 14 9	10 6 4	10 4 6	9 8 1	2 1 1	4		1	1	1		
Genesee	357	Total Males Females	121 15 106	288 145 143	158 98 .60	51 35 16	31 20 11	18 12 6	14 9 5	8 5 3	7 4 3		6 4 2	4 3 1		1	
Gladwin	51	Total Males Females	29 2 27	33 22 11	14 10 4	7 4 3	5	5 4 1	5 1 4	2 1 1			2			:	
Gogebic	133	Total Males Females	35 2 33	102 46 56	71 47 24	36 23 13	14 11 3	2 2	3 2 1		:::				=		20-12
Gr'd Tråverse	144	Total Males Females	37 1 36	109 44 65	70 48 22	29 18 11	19 16 3	8 5 3	5 4 1	5 4 1		1	1 i	1	1		
Gratiot	274	Total	132 11 121	222 120 102	92 70 22	30 24 6	29 19 10	17 14 3	8 4 4	4 3 1		3 2 1		1 1		2	
Hillsdale	256	Total Males Females	80 9 71	194 94 100	116 78 38	40 25 15	20 12 8	13 7 6	15 9 6	6 4 2	6	945	5	1	2		-
Houghton	432	Total Males Females	111 4 107	351 145 206	246 177 69	84 57 27	26 19 7	18 12 6	12 9 3	5 2 3	2 1 1	6 4 2	3 2 1				
Huron	218	Total Males Females	77 1 76	198 95 103	89 71 18	23 18 5	18 13 5	10 5 5	8 6 2	3		1 3	1		1		
Ingham	335	Total Males Females	125 15 110	239 115 124	150 101 49	47 33 14	38 28 10	15 9 6	22 11 11	12 8 4	9 5 4	5 4 1	6 4 2	1	1		
Ionia	311	Total Males Females	94 9 85	244 118 126	142 91 51	51 33 18	28 18 10	. 15 9 6	14 12 2	12 5 7	10 6 4		7 6 1		200		
Iosco	77	Total Males Females	22 22	66 30 36	35 26 9	12 9 3	8 4 4	2 2	5 2 3	2 2		1					

Table 43.—CONTINUED.—Number of persons married, by sex and periods of age.

	Total		1	Numbe	er of	per	sons	mai	ried	, by	peri	ods	of a	ge, 1	896.	
Countles.	mar- riages, 1896.	Sex.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80
Iron	19	Total	7	10 4 6	13 10 3	4 2 2	3 2 1	1					::::			
sabella	163	Total Males Females	84 7 77	130 78 52	58 38 20	18 14 4	16 11 5	3 1		22	1 1	2				
Jackson	447	Total Males Females	111 9 102	357 169 188	211 131 80	84 50 34	50 35 15	32 16 16	18 16 2	10 6 4	9 7 2	3	3			
Kalamazoo	406	Total Males Females	94 7 87	331 158 173	191 118 73	59 38 21	41 24 17	31 20 11	24 15 9	17 11 6	7 2 5	7 5 2	5			1
Kalkaska	52	Total Males Females	18 18	32 18 14	23 14 9	2 2	8 6 2	3 2 1	7 4 3	2 1 1	2 1 1			=	1 i	1
Kent	1,049	Total Males Females	282 17 265	821 392 429	479 317 162	188 122 66	128 74 54	64 37 27	51 36 15	30 15 15	24 17 7	14 8 6	9	3		1
Keweenaw	11	Total Males Females	8 1 7	8 3 3	6 5 1	=	1	1	:::	=	==	Z.:				
Lake	40	Males Females	16 1 15	24 14 10	22 15 7	4 3 1	3	4 2 2	4 3 1		1	1				1
Lapeer	246	Total Males Females	85 5 80	171 86 85	118 71 47	37 27 10	33 23 10	17 12 5	6 5 1	7 5 2		1		1		1
Leelanau	62	Total Males Females	24 1 23	52 25 27	20 14 6	14 10 4	7 6 1	4 3 1						1		
Lenawee	464	Males Females	129 8 121	368 181 187	202 131 71	71 41 30	46 33 13	28 15 13	21 12 9	28 19 9	10 8 2	7	7			1
Livingston	182	Total Males Females	44 6 38	143 59 84	81 53 28	35 21 14	28 18 10	11 9 2	9 6 3	5 4 1	1	3		1		1.
Luce	16	Males Females	3	10 5 5	12 6 6	2 1 1		2 1 1	3							
Mackinac	58	Males Females	26 26	43 23 20	30 22 8	7 6 1	3 1	3 2 1	1	1 i	1					
Macomb	243	Total Males Females	64 1 63	206 101 105	127 78 49	34 27 7	22 16 6	10 5 5	7 3 4	4 3 1	1	4 1 3			2	1
Manistee	192	Total Males Females	57 1 56	157 67 90	90 69 21	31 23 8	20 15 5	12 7 5	7 2 5	3 2 1			3			
Marquette	306	Males Females	80 4 76	239 105 134	162 106 56	69 50 19	36 21 15	12 12	6 4 2	5 2 3	1 1	1				
Mason	119	Total Males Females	47 4 43	99 50 49	46 33 13	22 17 5	9 4 5	3 3	7 5 2	2 1 1	1	2 1 1				

Table 43.—Continued.—Number of persons married, by sex and periods of age.

	Total		1	Numb	er o	per	sons	ma	rried	l, by	per	iods	of a	ge, 1	896.		
Counties.	mar- riages, 1896.	Sex.	Un- der 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80	Tink
Mecosta	161	Total	71 2 69	109 60 49	72 53 19	23 16 7	15 10 5	7 4 3	6 2 4	9 7 2	4 3 1			1	1 1		
Menominee	148	Total Males Females	57 57	110 54 56	68 47 21	32 26 6	11 10 1	7 5 2	22	3 2 1	3			:::			
Midland	88	Males Females	48 1 47	65 39 26	23 20 3	13 11 2	4 1 3	5 1 4	10 8 2	3		1 1	1				4. 1. 4
Missaukee	47	Total Males Females	15 15	37 18 19	18 12 6	10 7 3	9 6 3	3	2 1 1			:::					
Monroe	302	Males	89 2 87	262 132 130	140 93 47	38 26 12	26 18 8	16 10 6	17 9 8	6 4 2	3		3				
Montealm	261	Total Males Females	127 9 118	182 108 74	93 63 30	36 26 10	26 16 10	14 10 4	7 5 2	8 3 5	9	7	5				
Montmorency.	₩9	Total Males Females	9	12 9 3	9 4 5	4	. 2		2 1 1		::::			:::			
Muskegon	234	Total Males	76 4 72	176 78 98	106 77 29	46 32 14	22 14 8	19 13 6	7 5 2	7 5 2							
Newaygo	180	Total Males Females	79 4 75	126 68 58	78 51 27	32 28 4	14 9 5	7 3 4	7 3 4	8 7 1	6 4 2		2 2	1			
Oakland	319	Total Males Females	78 6 72	233 101 132	175 112 63	54 39 15	25 15 10	18 8 10	17 13 4	18 11 7	7 5 2	5 2 3	5	2 2	- 1		
Oceana	160	Total Males	72 5 67	115 62 53	56 40 16	25 18 7	16 10 6	8 7 1	11 7 4		5 4 1	2 1 1	3	22			
Ogemaw	42	Total Males Females	19 19	23 11 12	23 15 8	10 9 1	5 3 2	1	2 2	1				:::			
Ontonagon	36	Total	6	27 10 17	16 10 6	8 7 1	4 3 1	2 1 1	1								
Osceola	128	Total Males Females	53 1 52	102 53 49	52 39 13	17 14 3	8 5 3	3	9 5 4	4 1 3	2 1 1	4	2				
Oscoda	18	Total Males Females	8 8	12 7 5	6 4 2	4	3 2 1	1 	==		1 1	===	1			::	
Otsego	40	Total Males Females	19 19	28 15 13	14 10 4	11 10 1	1	3 2 1		1	1			2 1 1			
Ottawa	305	Total Males Females	96 4 92	246 119 127	144 101 43	53 37 16	17 10 7	13 11 2	14 6 8		6 4 2	3	2	4 3 1	2 2	2	
Presque Isle	42	Total Males Females	19	40 24 16	12 8 4	6 5 1	4 3 1	1			2 1 1		:5::	***			

Table 43.—CONCLUDED.—Number of persons married, by sex and periods of age.

	Total			Numb	er o	per	sons	ma	rried	l, by	per	iods	of a	ge, 1	896,		
Counties.	mar- riages, 1896.	Sex.	Un- der 20	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80	Tink
Roscommon	6	Total Males Females	4	3 2 1	2 2	1	1	1 i		===					==	44	-
Saginaw	649	Males Females	185 2 183	551 256 295	295 205 90	107 75 32	56 45 11	27 17 10	24 16 8	24 14 10	13 8 5	6	2	3			-
Sanilae	249	Males Females	77 2 75	214 101 113	77	41 26 15	25 20 5	7 5 2	9 7 2	8 4 4			1	2			
Schooleraft	55	Males Females	14	38 14 24	22	15 10 5	4	1	2 1 1	1	4 3 1		=				-
Shiawassee	334	Total Males Females	106 3 103	258 132 126	151 102 49	51 34 17	38 21 17	14 8 6	16 11 5	11 10 1	9 5 4	2	3	1	2		
St. Clair	471	Total Males Females	129 11 118	335 136 199	247 165 82	102 72 30	53 37 16	26 18 8	18 6 12	16 12 4		6	5				
St. Joseph	266	Total: Males Females	88 9 79	203 98 105	81	65 41 24	23 13 10	10 3 7	13 11 2	4 2 2	3 2 1	3 2 1	4		-		-
Tuscola	304	Males Females	120 4 116	232 125 107	123 85 38	47 31 16	27 21 6	18 13 5	10 5 5	9 5 4	7 5 2		1	1	1	1	
Van Buren	288	Total	119 17 102	218 110 108	104 72 32	45 34 11	25 12 13	13 10 3	15 10 5	9 6 3	10 3 7	6	4	2	1		-
Washtenaw	324	Males	65 4 61	267 114 158	173 104 69	65 48 17	21 18 3	19 14 5	11 5 6	9 4 5	5 4 1	5 3 2	3		1		
Wayne	2,413	Males Females	488 16 472	2,010 876 1,134	842	482 330 152	235 158 77	109 68 41	82 48 34	40 27 13	33 22 11	17 14 3	4				-
Wexford	136	Males	54 2 52	99 56 43	38	21 12 9	13 9 4	15 10 5	3 2 1	1 3	3 2 1	4 3 1					7 10 1

PART IV.—DEATHS IN MICHIGAN DURING THE YEAR 1896.

There were 21,983 deaths returned as having occurred in Michigan during the year 1896. This shows a decrease of 774 deaths from the number returned for the preceding year (22,757), and the death rate decreased correspondingly from 10.0 in 1895 to 9.5 in 1896. This rate includes stillbirths and represents the number of persons who died per 1,000 estimated population. The year on the whole was a very favorable one, no special epidemics having occurred, while the mortality from one very important cause of death-consumption-was the lowest ever recorded in the history of Michigan vital statistics. The total number of deaths from dangerous communicable diseases, including in this number consumption, diphtheria, scarlet fever, typhoid fever, whooping cough, measles, and some others of less importance. was only 4,258. This was the smallest number from this group of diseases recorded in Michigan since the year 1878. During this period of nearly twenty years the State has largely increased in population, so that the death rate per 100,000 population from dangerous communicable diseases during the year 1896 (183.9) was far lowerthan that for the year 1878 (255.3), or for any other year of registration. This is a fact of very great importance and interest to the people of Michigan, for it is on the diseases included in this group that the State Board of Health has chiefly expended its efforts during the quarter-century of its existence, and the extremely low death rate during the year would seem to be strong evidence of the success of its work in preventive medicine.

The mortality statistics of Michigan have been collected by a perfectly uniform method since the year 1869, hence comparisons like the above are reliable, even though it be well known that the old Michigan law for the registration of deaths did not obtain all of the deaths that occurred. For many purposes, such as the comparison of the mortality of different years from all causes or from specific causes of death, the age and sex distribution of decedents, and the like, which do not depend for their accuracy upon an absolutely complete registration of deaths, the data presented in this series of Registration Reports up to the present time is fairly satisfactory. For the establishment of reliable death rates, comparable with the statistics of other states or countries, and for the study of the relation of mortality tometeorological conditions, however, the old data were nearly if not quite worthless. We are fortunate in having, since August 29, 1897, a system of immediate registration of deaths in operation in this State, whose results, as published from month tomonth in the Michigan Monthly Bulletin of Vital Statistics, have already proved themselves to be far more reliable than those obtained under the old system. The present Report contains practically the last year's mortality statistics collected underthe old law without change from former methods. It is true that the statistics of the entire year 1897 are to be collected by the supervisors as usual, but examination of the returns so far made to this Department have shown that for the latter part of the year some supervisors, contrary to the recommendations of this Department, have availed themselves of the deaths registered by the township clerks in making their returns, and that in consequence the returns for the last four months of 1897 will be somewhat more complete than customary under the old law. The present Report, therefore, marks the disappearance of the old system. For this reason the usual tables are presented in order that the series of statistics of which this year forms the practical termination may be complete, but the explanatory text will be as condensed as possible. Present interest is determined chiefly to the working of our new registration law and the study of its valuable and timely results.

Besides the decrease in the dangerous communicable diseases, which has been referred to above, there was a decline in the number of deaths from bowel diseases, especially "cholera infantum." Many of the deaths grouped under this class are properly considered as due to food infection and unfavorable hygienic conditions, so that next to the dangerous communicable diseases, this group offers the most promising field for life-saving. Brain diseases showed slight changes in the recorded mortality from the preceding year. Cancer continued its regular increase, although the number of deaths reported from "tumor" was slightly less than for 1895. Influenza showed a marked decline, falling off from 410 deaths in 1895 to 248 in 1896. The latter number is the least from this cause since the year 1889, just prior to the great epidemic. Lung diseases generally, excluding consumption, were less fatal than in 1895, but more deaths have resulted from this group of causes during the past few years than were formerly reported. There seems to be a tendency to increase in this class of diseases. These few remarks on causes of death are intended to call attention to the necessity of studying them in relation to the general age distribution of the mortality of the year.

As in previous Reports, this portion is divided into two sections, viz.: SECTION I.—
THE INCIDENCE OF DEATHS, by months, sex, age, color, nativity, nationality, geographical location, etc., and SECTION II.—THE CAUSES OF DEATHS. It should not be
understood that the second division fails to study the factors mentioned in the preceding group, but its distinctive feature is that it classifies them with reference to
particular diseases, instead of simply showing their relation to total mortality.

It may be noted that in the above list nationality is given for decedents in Michigan as well as nativity; the former is much more definite and is of greater statistical value. At the close of section II some tables are given relating to occupations of decedents, for the reason that the subject is chiefly studied with respect to the causes of death affecting occupations.

Besides the tables contained in this part of the Report, the tables in Part I should be referred to, especially Tables 2, 3, 5 and 6, for comparative statements of the deaths registered for previous years; death rates with and without inclusion of still-births; deaths and death rates by counties, and variations in the returns of deaths, by counties, between the years 1895 and 1896.

SECTION I.—INCIDENCE OF DEATHS IN MICHIGAN DURING THE YEAR 1896.

The tables in this section contain statements in regard to the incidence of deaths in the State during the year 1896, arranged to show the following particulars: (1) Deaths by months; (2) number and proportion of each sex among the decedents; (3) deaths by ages of decedents; (4) nativity; (5) nationality; (6) color and race. Herewith is presented a brief statement of the more prominent facts contained in this section:

section:	*								
SUMMARY OF THE	REGISTR	ATION	OF D	EATH	s for	t THI	C YE	AR 18	396.*
Total number of deaths re Death rate per 1,000 estin Decrease of Deaths returne	nated po	_		rom :	the n	u m be	er re	turn	
for 1895 (22,757), .	•	•	•	•	•		•	•	774
In the above statement of Excluding these, as is custon									per of 1,254.
Total number of deaths, so Death rate, stillbirths exc		s excl	uded,	•	•	•	•	•	20,729
Of the 21,983 deaths in 189	6 there v	were:		,					
Males,	•	•	•	•	•		• .	•	11,807
Females,	•	•	•	•		•	•		. 10,119
Sex anknown or unspecific	ed (47 of	these	still	birth	8),		•	•	57
With respect to age at d exclusive of stillbirths:	leath, th	ere w	ere of	the	20,469	dea	ths	at sp	ecified ages,
Deaths of infants under 1 Deaths of children under 1 Deaths of children under 1	5 years 1 year o	of age	per 1,		iving	6, birt	085 ths,	or 29	0.0 per cent 9.5 per cent 91.0
The average ages at death births, were as follows:	ı, accord	ing to	the re	eturns	for 1	896,	and e	exclu	sive of still-
Both sexes and all nativit	ies,	•	•	٠.		•	•		35.3 years
Males,	•	•	•	•	•		•	•	36.4 years
Females,	•	•	•	•		•	•		34.1 years
Native born (persons),								_	977 7 VAGING
Foreign born (persons),	•	•	•	•	•		•	•	27.7 years
	•	•	•	•	•	•	.•	·	55.4 years
Classifying the decedents	by color	and r	· ace, th	ere v	vere:	•		•	-
Classifying the decedents White,	•		•	•	vere:	•	•	•	-
Classifying the decedents White, Colored (black, 129; mula	tto, 42;		•	•	vere:	•	•		21,696 284
Classifying the decedents White,	tto, 42;		•	•	vere:	•	•	•	55.4 years 21,696
Classifying the decedents White, Colored (black, 129; mula	tto, 42; ified,	India	n, 11	3),	vere:	•	•	•	21,696 284
Classifying the decedents White, Colored (black, 129; mula Color unknown or unspeci	tto, 42; ified,	India	n, 11	3),	vere:	•	•	•	21,696 284
Classifying the decedents White, Colored (black, 129; mula Color unknown or unspect	tto, 42; ified, including	India	n, 11	3),	vere:			•	55.4 years 21,696 . 284

st See also Summary at beginning of Section II relating especially to Causes of Death registered for 1896.

By nationality of the foreign born, including all nationalities having over 250 decedents returned for the year, we have:

Canada, .	•	•	•		•		•		•			•	•			1,286
England a	nd	Wales,		•		•		•		•					•	637
Ireland,	•	•	•				•		•		•	•	•	•		666
Germany,		• .	•	-		•				•					•	1,830

Synopsis of tables relating to the incidence of deaths by months, sex, age, nativity, nationality and color of decedents.

Fable.	Incidence of deaths in Michigan, 1896.
	A.—General tables.
44.	Deaths returned, by months, for ten years, 1887-96; with average for the ten-year period.
45.	Deaths returned, by sex and periods of age, during the year 1896.
46.	Deaths returned, by sex, for sixteen years, 1880-96, with rates per 1,000 population of sam sex, ratios of deaths of males to deaths of females; and relative male mortality for eac year; also average for the ten-year period, 1887-96.
47.	Death rates per 1,000 population at important periods of age, per cents of deaths at thos ages to total deaths at specified ages, and deaths of infants under one year of age pe 1,000 births, for each of the years 1870-96; with quinquennial averages.
48.	Death rates, by sex, at certain important periods of age, 1896.
49 .	Death rates, by nativity, at certain important periods of age, 1896.
50.	Average ages at death. by nativity and sex, for the years 1892-96.
51.	Nativity of decedents for the years 1887-96, with average of the ten-year period.
52.	Nationality of decedents, 1896, with rates per 1,000 population of like nationality.
58.	Deaths by months, at certain periods of age; showing the percentage of the deaths in eac month and age period to total deaths in corresponding months and age periods, 1896.
	$BDetailed\ tables.$
54.	Statement by counties of the number of deaths returned for each month, 1896, showing set of decedents.
55.	Statement by counties of the number of deaths returned for the year 1896 at each five-year period of age (and at each year of age under five), showing sex of decedents.
56.	Showing by ages in periods of years, and by sex, the number of deaths returned for each month of the year 1896.
57.	Showing by ages in years (by months under one year), and by sex, the number of death returned for each month of the year 1896.
58.	Statement by counties of the number of deaths returned of each color during the year 1896 specifying sex.
59	Statement by counties of the number of deaths returned of each nativity during the yea 1896, specifying sex.
60.	Statement by counties of the number of deaths returned of each nationality during th year 1896, specifying sex.
61.	List of townships reporting that no deaths occurred in 1896, showing population by State census in 1894.
62.	List of delinquent townships (those making no returns of deaths) for the year 1896, showing population in 1894.

DEATHS RETURNED BY MONTHS, 1887-96.

In Table 44 the number of deaths returned by months for 1896 may be compared with each of the years since 1887, and also with the average of the ten-year period 1887-96. This average, it must be noted, has not been corrected for increase of population, so that the general relations of the deaths returned in the several months of the same year or period can only be compared. It was well known that the indications of this table were quite unreliable in showing the seasonal mortality of the year, and the new registration law for deaths, in effect August 29, 1897, has already presented more reliable data on this subject than could be obtained from the old law during its entire history.

Table 44.—Deaths returned, by months, for the years 1887-96, inclusive; with average for the ten-year period. (Still births included.)

Years	Total for							Mon	ths.					
1 cars	year.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1887	19,482	1,249	1,274	1,535	1,599	1,472	1,405	1,915	2.055	1,916	1,699	1,554	1,743	66
1888	21,764	1,416	1,585	1,865	1,909	1,858	1,627	1,789	2.169	1,978	1,848	1,642	2,012	66
1889	20,315	1,409	1,266	1,676	1,585	1,454	1,389	1,677	2.214	2,025	1,894	1,712	1,951	63
1890	21,642	1,745	1,599	1,776	1,807	1,704	1,633	1,849	2.032	1,892	1,808	1,739	2,027	31
1891	22,079	1,486	1,385	1,774	2,047	1,732	1,560	1,678	2,147	1,973	2,011	1,860	2.351	48
1892	21,729	2,152	1,687	1,735	1,878	1,700	1,481	1,678	1,942	1,802	1,892	1,788	1,949	45
1893	21,982	1,413	1,454	1,789	1,668	1,744	1,616	1,695	2,042	2,166	1,909	1,818	2,605	63
1894	20,959	1,404	1,272	1,641	1,727	1,705	1,619	1,668	2,024	2,047	2,007	1,845	1,975	25
1895	22,757	1,523	1,654	2,098	1,893	1,808	1,556	1,850	2,163	2.304	2,072	1,851	1,942	42
1896	21,983	1,434	1,558	1,819	1,918	1,672	1,585	1,775	2,071	2,057	1,938	1,915	2.185	56
Average 1887-96	21,469	1,523	1,473	1,771	1,803	1,685	1,547	1,757	2.086	2,016	1,908	1,772	2,074	51

Maxima in hold-face type: minima in italics.

Table 45 shows the age and sex distribution of the deaths returned in Michigan during 1896. The percentages of deaths at each age, by sex, and the percentages of the deaths of each sex, by quinquennial periods of ages, are shown, together with the excess percentage of each sex at each age and the ratio of deaths of males to 100 deaths of females. This table deals only with deaths; as the number of deaths of either sex at any given age depends upon the constitution of the population with reference to that group, the death rates by sex at different periods of age given elsewhere (Tables 46 and 48) afford more satisfactory bases of comparison.

In Table 46 the relative death rates of the sexes in Michigan may be compared for a series of years. The inclusion of stillbirths increases the relative male mortality, which for the ten-year period 1887-96 is seen to be 9 per cent greater than the mortality of the female population. In Table 48 some additional comparisons of the death rates of the sexes are made for the year 1896, with distinction of age periods.

Table 45.—Exhibiting, by sex, and by age in periods of years, the number and proportion of persons returned as having died in Michigan during the year 1896. (Stillbirths included.)

	Numb	er of de	aths, 18	96.	deat	ths at to to all ag	each	of e	ach s	of der ex to t sexes	otal	of t sexes	he s by	ales.
Ages in years and periods of years.			-					1		Exc	ess.		Ŧ	00 fem
	Total	Males.	Fema'es.	Unknown.	Total	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males to 100 females.
All ages	21,983	11,807	10,119	57	100.0	100.0	100.0	53.7	45.0	7.7		1,688		117
Stillbirths	1,254	687	520	47	5.7	5.8	5.1	54.8	41.5	13.3		167	,	13
Under 1 year*	4,098	2,313	1,780	5	18.6	19.6	17.6	56.4	43.4	13.0		533		130
1 year	884	446	438		4.0	3.8	4.3	50.5	49.5	1.0		8		10
2 years	485	265	220		2.2	2.2	2.2	54 6	45.4	9.2		45		120
3 years	305	155	150		1.4	1.3	1.5	50.8	49.2	1.6		5		100
4 years	263	138	125		1.2	1.2	1.2	52.5	47.5	5.0		13		110
Under 5 years*	6,035	3,317	2,713	5	27.5	28.1	26.8	55.0	45.0	10.0		604		123
5 to 9	768	403	365		3.5	3.4	3.6	52.5	47.5	5.0		38		11
10 to 14	523	264	259		2.4	2.2	2.6	50.5	49.5	1.0		5		100
15 to 19	759	347	412		3.5	2.9	4.1	45.7	54.3		8.6		65	8
20 to 24	959	393	566		4.4	3.3	5.6	41.0	59.0		18.0		173	6
25 to 29	875	413	462		4.0	3.5	4.6	47.2	52.8		5.6		49	89
30 to 34	745	349	396		3.4	3.0	3.9	46.8	53.2		6.4		47	8
35 to 39	786	353	433		3.6	3.0	4.3	44.9	F5.1		10.2		80	8
40 to 44	687	359	328		3.1	3.0	3.2	52.3	47.7	4.6		31		10
45 to 49	721	378	343		3.3	3.2	3.4	52.4	47.6	4.8		35		110
50 to 54	859	466	393		3.9	3.9	3.9	54.2	45.8	8.4		73		11
55 to 59	852	494	358		3.9	4.2	3.5	58.0	42.0	16.0		136		13
60 to 64	1,044	638	406		4.7	5.4	4.0	61.1	38.9	22.2		232		157
65 to 69	1,139	645	494		5.2	5.5	4.9	56.6	43.4	13.2		151		13
70 to 74	1,238	708	530		5.6	6.0	5.2	57.2	42.8	14.4		178		134
75 to 79	1,102	653	449	,	5.0	5,5	4.4	59.3	40.7	18.6		204		14
80 to 84	781	444	337		3.6	3.8	3.3	56.9	43.1	13.8		107		133
85 to 89	409	249	160		1.9	2.1	1.6	60.9	39.1	21.8		89		156
90 to 94	139	71	68		.6	.6	.7	51.1	48.9	2.2		3		10
95 to 99	39	23	16		.2	.2	.2	59.0	41.0	18.0		7		144
100 and over	9	5	4		.0	.0	.0	55.6	44.4	11.2		1		125
Unknown ages	260	148	107	5	1.2	1.3	1.1	56.9	41.2	15.7		41		138

^{*} Excluding stillbirths.
† Unknown sex excluded.

Table 46.—Deaths in Michigan, by sex, for each of the years 1880-96, inclusive, with death rates per 1,000 population of same sex, ratios of deaths of males to deaths of females and relative male mortality. (Stillbirths included.)

	Popul	ation.	Number	of deaths.	Rates p	er 1,000.	Deaths of males	Relative male
Year.	Males.	Females.	Males.	Females.	Males.	Females.	to 100 deaths of females.	mor- tality.†
1880*	862,355	774,582	8,645	7,410	10.0	9.6	116.7	104
1881	890,372	800,694	10,263	8,910	11.5	11.1	115.2	104
1882	918,390	826,805	8,713	7,664	9.5	9.8	113.7	102
1883	946,407	852,917	9,101	7,748	9.6	9.1	117.5	105
1884*	974,424	879,028	9,589	8,385	9.8	9 5	114.4	103
1885	993,983	899,542	9,025	7,569	9.1	8.3	119.2	110
1886	1,013,543	920,055	9,725	8,402	9.6	9.1	115.7	105
1887	1,033,102	940,569	10,563	8,877	10.2	9.4	119.0	108
1888	1,052,661	961,082	11,722	10,024	1k.1	10.4	116.9	107
1889	1,072,221	981,596	10,984	9,297	10.2	9.5	118.1	107
1890*	1,091,780	1,002,109	11,801	9,771	10.8	9.8	120.7	110
1891	1,108,970	1,021,857	11,908	9,998	10.7	9.8	119.1	109
1892	1,126,160	1,041,605	11,837	9,809	10.5	9.4	120.7	112
1893	1,143,350	1,061,353	11,772	10,142	10.3	9.6	116.1	107
1894*	1,160,540	1,081,101	11,159	9,744	9.6	9.0	114.5	107
1895	1,177,730	1,100.849	12,161	10,510	10 3	9.5	115.7	108
1896	1,194,920	1,120,597	11,807	10,119	9.9	9.0	116.7	110
Average, 1887-96	1,116,143	1,031,272	11,571	9,829	10.4	9.5	117,7	109

Table 47 is one of the most important in the Report, since it enables the course of mortality at certain important age periods to be followed through the successive years of registration. The portion of the table to the left of the parallel rules is of greatest interest, death rates being stated per 1,000 population of the same period of age. Thus in 1896 the death rate of infants under one year of age was 69.6 per 1,000 --lower than any year since 1879. That of children under 5 years of age was also very low, 21.8 per 1,000, or lower than any other year in the table except 1878. Other periods of ages can be compared in a similar manner. On the right of the table are given percentages of the deaths at each age period to total deaths at all ages. These ratios, although less valuable for statistical comparison than death rates based on population, are sometimes referred to, and are therefore given in a convenient form for examination.

Diagram I shows graphically how the death rates given in Table 47 varied for five successive quinquennial periods and the last two single years.

^{*} Census years (State censuses, 1884 and 1894).
† Ratio of death rates (not deaths) of males to death rates of females. This comparison eliminates the unequal distribution of the sexes in the population.

	·		

DIAGRAM I.—Death Rates in Michigan, by Important Periods of Age, for the Quin-quennial Periods 1870-74, 1875-79, 1880-84, 1885-89, 1890-94, and the Years 1895 and 1896.

1870 1875 1880 1885 1890

	to 1874	to 1879	to 1884	to 1889	to 1894	Year 1895	Year 1896
1							
80							
70							
60							
50							
40					Н		Н
30'			4	Н			Н
20	Н			Н	Н	Н	H
10	111111111111111111111111111111111111111	I B H D V-		, n m p v-		I A B E V-	

Note—See Table 47 on opposite page—Scale indicates deaths per 1,000 estimated population of same age. Five groups of ages are shown, as follows: I. Under 1 year; II. Under 5 years; III. Aged 5 to 14 years; IV. Aged 15 to 64 years; V. Aged 65 years and over.

Table 47.—Death rates per 1,000 population at certain specified periods of age, (with percentage to deaths at all ages) and ratios of deaths under one year of age per 1,000 living births, for each of the years 1870-96, inclusive; with averages for quinquennial periods, and for the quarter century. (Stillbirths excluded from both births and deaths.)

40000	Dea		per 1,000 espondin			of		ntages o total de				Deaths of infants under 1
Years and periods.	All ages.	Under 1 year.	Under 5 years.	5 to 14.	15 to 64.	65 and over,	Under 1 year.	Under 5 years.	5 to 14.	15 to 64.	65 and over.	year of age per 1,000 living births.
1870	8.9 7.7 10.3 10.6 8.8	74.4 58.3 88.7 92.4 79.5	26.5 21.2 30.9 31.7 25.7	3.5 2.9 4.0 4.4 3.0	5.4 4.8 6.3 6.5 5.6	37,0 36,9 38,1 41,2 38,0	23.5 21.2 23.9 23.9 24.6	42.1 38.7 41.6 40.9 39.6	9.6 9.3 9.3 9.9 8.1	36.6 38.1 37.2 37.2 37.2 38.7	11.6 14.0 11.9 12.0 13.7	91.3 75.6 110.9 96.0 94.8
1875	8.1	71.2	23.3	2.6	5.1	34.6	24.2	39.1	7.8	39.1	14.0	85.5
	8.2	72.0	23.5	3.0	5.0	37.9	23.7	38.3	8.5	37.8	15.4	82.8
	8.1	66.9	23.0	3.2	5.0	37.1	22.1	37.5	9.2	37.8	15.4	81.1
	7.7	59.7	21.2	3.4	4.6	36.0	20.6	35.8	10.0	38.0	16.0	70.5
	8.6	67.5	24.3	4.3	5.0	38.5	20.8	36.7	11.7	36.0	15.7	84.1
1880	9.4	75.7	27.4	4.6	5.4	39.9	21.5	37.9	11.3	35.7	15.2	93.5
	11.0	91.7	33.8	6.1	6.1	41.3	21.7	39.0	12.6	34.7	13.7	116.4
	9.0	73.3	26.1	4.7	5.3	36.8	20.9	36.3	11.9	36.3	15.4	88.7
	9.0	74.5	25.8	3.8	5.5	37.7	21.1	35.5	9.7	38.5	16.3	83.0
	9.4	88.5	28.7	3.8	5.5	39.2	23.7	37.4	9.2	36.9	16.5	101.2
1885	8.4	72.9	23.6	3.2	5.2	37.6	21.6	34.1	8.6	39.1	18.2	81.2
	9.0	83.2	27.2	3.3	5.4	38.7	22.8	36.4	8.3	37.5	17.9	96.1
	9.5	86.1	28.4	3.4	5.7	41.4	22.1	35.5	8.1	37.9	18.5	(97.2) 89.3
	10.2	97.0	30.8	3.3	6.2	44.9	23.0	35.4	7.2	38.3	19.1	(103.4) 97.2
	9.3	84.5	27.6	3.2	5.8	40.4	21.7	34.3	7.6	39.1	19.1	(91.1) 84.9
1890	9.7	84.0	27,2	3.8	6.1	41.9	20.6	32.4	8.6	39.7	19.4	(89.7) 80.8
	9.9	86.3	26.9	3.3	6.1	46.0	21.3	32.0	7.5	39.3	21.2	(93.7) 87.8
	9.6	78.3	25.1	3.2	5.9	47.0	20.2	31.0	7.4	39.3	22.4	90.5
	9.5	80.8	25.0	3.1	5.9	46.8	21.1	31.1	7.2	39.1	22.4	93.2
	8.9	75.3	22.8	2.6	5.7	43.5	21.2	30.6	6.4	40.8	22.3	95.9
1895	9.5	78.0	23.2	2.5	6.2	50.9	20.6	29.1	5.7	41.0	24.2	97 9
1896	9.0	69.6	21.8	2.6	5.7	46.2	20.0	29.5	6.3	40 4	23.7	91.0
1870-74	9,3	78.7	27.2	3.6	5.7	38.2	23.4	40.6	9.2	37.6	12.6	93.7
	8,1	67.5	23.1	3.3	4.9	36.8	29.3	37.5	9.4	37.7	15.3	80.8
	9,6	80.7	28.4	4.6	5.6	39.0	21.8	37.2	10.9	36.4	15.4	96.6
	9,3	84.7	27.5	3.3	5.7	40.6	22.2	35.1	8.0	38.4	18.6	(93.8) 89.7
	9,5	80.9	25.4	3.2	5.9	45.0	20.9	31.4	7.4	39.6	21.5	(92.6) 89.6
1870-94	9.2	78.5	26.3	3.6	5.6	39.9	22.1	36.4	9.0	37.9	16.7	(91.5) 90.1

NOTE.—The numbers in parentheses in the last column of this table represent the figures for infant mortality after correction, as far as possible, for fraudulent returns of births and deaths from Wayne county (Detroit) during the years 1887-91. See Report for 1892, p. 14.

In Table 48 the estimated population, deaths and death rates, by sex, are given for the year 1896. Stillbirths are excluded, thus making the comparison fairer than that given in Table 46, and the important influence of childbearing as affecting the death rate of females is clearly shown. At every period of age except from 15 to 44 years, the death rate of males is higher than the death rate of females, but for this period the mortality of females exceeds that of males by 25 per cent.

Table 48. —Showing, by sex, the death rates	and relative male mortality in Michigan at
certain periods of age for the year 1896.	(Stillbirths and unknown sex excluded.)

Periods of age.	Estimated 1896		Death	s, 1896.*	Death rates per 1,000 population, 1896.		Relative male mortal-
	Males.	Females.	Males.	Females.	Males.	Females.	ity.+
All ages	1,194,921	1.120,596	11,120	9,599	9.8	8.6	108
Under 1 year	29,998	28,856	2,341	1,800	78.0	62.4	125
1–4	111,831	106,601	1,018	943	9.1	8.8	109
Under 5 years	141,829	135, 4 57	3,359	2,743	23.7	20.2	117
5–14	247,562	241,558	679	631	2.7	2.6	104
15-29	317,020	314,565	1,170	1,456	3.7	4.6	80
30-44	247,258	218,409	1,075	1,170	4.3	5.4	80
45-64	184,644	162,174	2,002	1,517	10.8	9.4	115
65 and over	56,608	48,433	2,835	2,082	50.1	48.0	117

^{*}Unknown ages distributed pro rata.

†Ratio of death rates (not deaths) of males to death rates of females, the latter taken as 100 per cent. This method of comparison eliminates inequalities due to unequal distribution of the sexes in the population.

A similar comparison is made in Table 49 of the death rates of the native and foreign born population at different age periods. For the early age periods the ratios are of somewhat doubtful validity, owing to the small number of deaths of the foreign born and the small basis of population.

Table 49.—Showing, by nativity, the death rates in Michigan at certain periods of age for the year 1896. (Stillbirths and unknown nativity excluded.)

Periods of age.	Estimated 1	oopulation, 6.*	Deaths	s, 1896.*	Death rates per 1,000 population, 1896.		
·	Native- born.	Foreign- born.	Native- born.	Foreign- born.	Native- born.	Foreign- born.	
All ages	1,730,036	585,481	14,820	5,111	8.6	8.7	
Under 1 year	58,579	262	4,055	40	69.2	+152.7	
1-4	206,041	5,845	1,897	44	9.2	1 8.2	
Under 5 years	264,620	5,607	5,952	84	22.5	†15.6	
5-14	452,864	43,210	1,186	99	2.6	+2.8	
15-29	476,090	155,498	1,938	572	4.1	3.7	
30-44	285,593	180,109	1,312	822	4.6	4 6	
45-64	193,118	153,731	1,802	1,503	9.3	9.8	
65 and over	57,751	47,326	2,630	2,031	45.5	42.9	

^{*} Unknown ages distributed pro rata.

† Desths of the foreign born returned at early ages are possibly too few to give reliable death rates.

Some additional information on the relative mortality of the native and foreign elements of the community may be found in the three tables following. Table 50 gives the average ages at death, by sex, of each nativity, with both inclusion and exclusion of stillbirths. The latter comparison is the fairest, since all of the still-births were formerly included among the deaths of natives in this table, thus unduly depressing the average age of this class. As it is, the natives have so much greater a proportion of children in their number that no conclusions as to longevity based on the average age at death are of value. Nor are the proportional deaths of each nativity, as given in Table 51, of any special interest in this connection, except, perhaps, as showing the fairly constant ratio of deaths of the foreign born in the mortality of Michigan for ten years past.

Table 50.—The average ages, by nativity, of decedents in Michigan for the years 1892-96, inclusive, with the mean of the five-year period.

Years.	All nativities.			Native born.			Foreign born.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females
	·		(Sti	llbirths in	cluded.)		,		
1892	32.2	32.4	32.0	24.9	24.5	25.5	52.6	53.0	52.
1893	31.8	82.4	31.1	24.6	24.5	24.7	53.1	53.8	52.3
1894	32.6	88.4	31.8	25.5	25.6	25.5	55.2	55.9	54.
1895	34.1	84.1	84.0	26.7	26.1	27.2	55.7	56.1	55.
1896	33.4	84.2	82.4	25.6	25.7	25.4	55.4	56.4	54.
Average for five years, 1892-96	32.8	88.3	82.8	25.5	25.3	25.7	54.4	55.0	53.0
	<u> </u>		(St	illbirths e	relud ed.)	·	·		
1892	33 7	34.1	33.3	26.5	26.3	26.8	52.6	53.0	52.
1893	33.3	34.1	32.4	26.2	26.3	26.1	53.1	53.8	52.
1894	34.2	35.2	33.2	27.2	27.4	26.9	55.2	55.9	54.
1895	35.8	36.0	35.4	28.5	28.2	28.8	55.7	56.1	55.
1896	35.3	36.4	34.1	27.7	28.0	27.3	55.4	56.4	54.
Average for a five years, 1892-96	34.5	35.2	33.7	27.2	27.2	27.2	54.4	55.0	53.

In presenting the statistics relative to average age at death and proportional deaths by nativity in the present Report, the compiler has followed the precedents established early in the history of registration in Michigan, and maintained down to the present time. The natural tendency in the compilation of official statistics is to routine. A table or statistical exhibit once introduced is likely to be continued from year to year simply from the force of inertia, and without reference to its special usefulness. Hence, also, forms of statistics, well enough at the time of their introduction but since replaced by better methods, are quite apt to clog statistical reports long after their usefulness has passed. The tendency to established forms is not

altogether without excuse, much of the value of certain classes of data depending upon their cumulative character due to the accession of the experience of year after year. On the other hand certain information can be as definitely secured by the compilation of a single year's statistics as by those of many years, in which case, unless of very unusual importance, the investigation should be promptly discontinued as soon as the desired information has been obtained. In other cases, special compilations for the years of decennial or quinquennial censuses will answer every purpose, besides having the advantage of being directly comparable with the population. This course will have the additional advantage of enabling many new lines of statistical investigations to be opened up, some of great possible usefulness, which could not be undertaken if all of the old lines of work were continued. These remarks are made relative to the possible discontinuance of certain tables in future Reports, it being deemed advisable to replace them by more important exhibits.

Table 51.—Nativity of decedents in Michigan for the years 1887-96, inclusive, with the average of the ten years. (Stillbirths included.)

Years.	All nativities.	Native	e born.	Foreig	n born.	Unknown nativity.	
2 5 4 1 5	Number.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1887	19,482	14,556	74.7	4,187	21.5	739	3.8
1888	21,764	16,328	75.0	4,501	20.7	935	4.3
1889	20,315	15, 171	74.7	4,405	21.7	739	3.6
1890	21,642	15,890	78.4	4,908	22.7	844	3.9
1891	22,079	16,287	73.7	4,811	21.8	981	4.5
1892	21,729	15,683	72.2	4,915	22.6	1,181	5.2
1893	21,982	16,187	73.6	5,061	23.0	734	3.3
1894	20,959	15,718	75.0	4,542	21.7	699	3,3
1895	22,757	16,621	73.0	5,126	22.5	1,010	4.4
1896	21,983	16,074	72.7	5,111	23.2	798	3.6
A verage, 1887-96	21,469	15,852	73.8	4,757	22.2	861	4.0

Table 52, showing the death rates by nationality, would seem to give more definite information as to the relative healthfulness of different races in this State, but it will be found on examination that the factor of age distribution largely influences the rates. Thus the English and Irish show higher death rates than the Germans, and these again exceed the Swedes and Poles. The low death rates in these cases correspond somewhat to the recent dates of immigration, and to a corresponding lower average age in the population. It is probable that data will be soon available, derived from the State census of 1894, which will enable death rates at age periods to be computed, thus affording the first reliable information in regard to the vital condition of the different nationalities.

Table 52.—Number of decedents of each nationality in Michigan during the year 1896, with rates per 1,000 estimated population of like nationality.

Country of birth.	Estimated population, 1898.	Deaths, 1896.	Death rates per 1,000 in- habitants of same national- ity, 1896.	Death rates per 1,000 in- habitants of same national- ity, 1895.	Death rates per 1,000 in- habitants of same nationa!- ity, 1894.
All nationalities	2,815,517	*20,729	*9.0	*9.5	*8.9
United States	1,731,175	*14,820	*8.6	*9.1	*8.8
Canada	209,963	1,286	6.1	6.3	5.9
England and Wales	45,910	. 637	13.9	14.2	10.7
Scotland	11,740	187	15.9	14.1	12.7
Ireland	33,299	666	20.0	21.3	17.7
Germany	146,831	1,330	9.1	9.5	9.1
Austria	5,157	27	5.2	4.9	4.1
Holland	34,597	219	6.3	7.2	7.0
Belgium	3,207	. 18	5.6	5.6	6.6
Switzerland	3,287	21	6.4	9.2	6.2
Norway	8,362	60	7.2	6.5	5.1
Sweden	28,613	201	7.0	5.5	5.8
Denmark	7,841	31	4.0	5.1	4.9
Russia (Finland)	18,284	75	4.1	4.1	8.4
Poland	15,215	84	5.5	5.9	4.2
Hungary	340	1	2.9	7.7	
Bohemia	2,980	11	3.7	4.5	4.7
France	1,683	47	27.9	16.8	14.0
Italy	3,552	16	4.5	5.2	4.7
All others	3,486	194	55.7	29.0	16.5
Unknown		798			
	l	l			

^{*} Stillbirths not included.

In concluding the general tables relating to the incidence of deaths in Michigan during the year 1896, a comparison of the percentages of deaths by months at certain important periods of age is presented in Table 53. The data in this table suffer from the inaccuracy affecting all of the returns by months under the old registration law, hence the relative monthly rates are not to be relied upon. The proportional deaths at each age in the individual months, however, are probably correct, and are of practical sanitary interest.

Table 63.—The relation of the deaths at different periods of age to deaths at all ages, by months; and for the same period of age the relation of

the deaths in each month to total deaths in the year 1896. (Stillbirths included.)	nonth to	total d	eaths in	the year	ır 1896	Sti	lbirths	include	d.)	To com	of miles			O
	Year						Months, 1896.	, 1896.						
Descins by ages in perious of years.	1896	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct	Nov.	Dec.	
All ages	+21,927	1,434	1,538	1,819	1,918	1,672	1,586	1,776	2,071	2,067	1,988	1,915	2,186	۷ ۱
+Under 1 year Number Per cent of all ages Per cent of all months	5,346 24.4 100.0	85 G 85 G 85 G 85 G	85 0.0 81 0.4.0	21.5 7.8	80.8 8.7.7	23.7 7.4	8 8 6 8 8 0	511 28.8 9.6	81.9 12.8	28.20 10.8	8.38 8.1.8	24.2 24.2 7.3	22.0 4.0 8.0	LIAL
Tuder 5 years Per cent of all ages	7,279 88.2 100.0	28.88 8.30 8.6	474 90.4 6.5	530 29 1 7.8	7.6	534 31.9 7.8	31.9 7.0	97.1 97.1	841 40.6 11.6	764 37.1 10.5	615 31.7 8.4	98.88 9.90	746 34.1 10.2	SIAI
6 to 9 Per cent of all ages Per cent of all months	3.5 100.0	8.55 6.55	20.7 7.0	6.2	8.8 4.8	20.00 80.00	85 80 80 80 80 80	3.1 7.2	80°8	71 9.5	4.5 11.3	88 4.4 11.11	98 4.3 12.1	11211
10 to 19. Per cent of all ages. Per cent of all months.	1,281 5.8 100.0	8 4.70 8 6.4	2.00	9.8 9.8	121 6.3 9.4	8.6 8.6	5.50 5.50	113 6.4 8.8	116 5.6 9.1	131 6.4 10.2	3.6 8.4 8.4	97 5.1 7.6	128 5.9 10.0	.s U.
20 to 49 Per cent of all ages Per cent of all months	4,762 21.7 100.0	23.5 7.1	21.8 7.1	22 82 80 8.00	461 24.0 9.7	24.2 8.5	22.22	365 20.6	20.8 9.0 9.0	808 19.1 8.3	21.8 8.9	876 10.6 7.9	200 9.0 9.0	L MI
50 and over Per cent of all ages Per cent of all months	7,598 84.7 100.0	30 gg 1-	585 37.5 7.7	88.50 8.7.80	96.0 9.1 9.1	556 7.4	550 36.6 7.6	559 31.5 7.4	808 4.08 8.0	6 83 æ	95.6 9.1	98.0	28.88 8.88 7.9	СПІС
Unknown age Per cent of all ages Per cent of all months.	230 1.1 100.0	8.1.8 4.4.	84.0	8 1.0 8 8.0	81.0	2.1 8.8	16 1.0 6.7	2.1.01 4.00	გ. გ. 4.	81.5	 5 8 8 8	86.5.	81.1.8 81.1.8	AIN,
										_				10

* Excluding 56 deaths in unknown month. + Including stillbirths.

Table 54.—Exhibiting, for the State and counties, by sex, the number of deaths returned in each month of the year 1896. (Stillbirths included.)

								Mon	ths, 1	896.					
State and counties.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
State	Total Males Females Unknown	21,983 11,807 10,119 57	1,434 750 681 3	1,558 848 707 3	1,819 949 865 5	1,918 992 921 5	1,672 865 804 3	1,585 876 703 6	1,775 957 812 6	2,071 1,151 913 7	2,057 1,146 911	1,938 1,030 904 4	1,915 1,027 882 6	2,185 1,186 993 6	
Alcona	Total Males Females	33 16 17	3 2 1	2 2	3 1 2	6 3 3	1	3 2 1	2	5 2 3	1 1	1 1	3 1 2		1.26
Alger	Total Males Females	28 20 8	::::	2 1 1	::::	1		3 1 2	4 4	3 2 1	9 5 4	4	2		
Allegan	Total Males Females Unknown	378 196 180 2	36 16 20	29 15 14	43 25 18	31 19 12	22 9 13	22 13 9	32 18 14	35 19 16	29 12 17	81 11 20	34 18 14 2	34 21 13	
Alpena	Males Females	156 87 69	6 4 2	16 9 7	9 5 4	14 6 8	12 8 4	9 4 5	17 7 10	13 10 3	12 8 4	15 6 9	15 11 4	18 9 9	
Antrim	Total Males Females	91 39 52	9 5 4	12 3 9	2 2	5 2 3	9 5 4	7 2 5	4 2 2	7 3 4	9 3 6	11 6 5	12 7 5	4 1 3	
Arenae	Total Males Females	50 27 23	₂	4 2 2	4 3 1	4 2 2	5 3 2	2 1 1		8 4 4	2 1 1	5 3 2	7 3 4	5 4 1	1
Baraga	Males Females	40 20 20	4 2 2	4 2 2	4 1 3	6 2 4	1	1	4 2 2	6 2 4	i	2 2	2 2	3	
Barry	Total Males Females	183 103 80	13 7 6	20 10 10	13 7 6	23 12 11	13 6 7	10 5 5	13 8 5	26 15 11	11 8 3	13 9 4	12 8 4	15 7 8	1
Вау	Total Males Females Unknown	535 298 236 1	25 14 11	41 22 19	42 16 26	49 32 17	52 26 26	45 29 16	52 32 20	46 24 21 1	51 29 22	44 29 15	45 19 26	48 26 17	
Benzie	Males Females	78 33 45	6 5 1	3 1 2	5 2 3	11 6 5	7 3 4	9 4 5	10 5 5	7 1 6	5 3 2	6 2 4	3	6 1 5	
Berrien	Total Males Females Unknown	387 202 179 6	13 5 8	33 17 16	33 20 13	30 15 15	28 16 12	26 10 13 3	23 12 10 1	37 22 15	46 28 18	32 18 14	31 15 16	41 19 21	14 5 8
Branch	Total Males Females	248 117 131	12 5 7	22 11 11	19 11 8	23 12 11	14 4 10	28 12 16	18 10 8	23 13 10	31 16 15	20 6 14	19 8 11	19 9 10	
Calhoun	Total Males Females Unknown	411 236 170 5	32 20 12	27 20 7	31 18 11 2	22 12 10	36 19 16	31 15 16	28 17 11	41 27 13 1	33 18 15	44 24 19	35 15 20	51 31 20	
Cass	Total Males Females	185 92 93	7 3 4	12 6 6	14 7	19 12 7	13 4 9	20 10 10	13 6 7	27 14 13	18 11 7	17 9 8	10 3 7	15 7 8	
Charlevoix	Males Females	72 41 31	1	4 4	3 2 1	6 2 4	5 1 4	2 1 1	9 7 2	7 1 6	6 1 5	10 8 2	9 6 3	10 7 3	

Table 54.—CONTINUED.—Deaths returned by counties, sex and months, 1896.

							Mor	nths, 1	896.						
Counties.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August,	September.	October.	November.	December.	Unknown.
Cheboygan	Total Males Females	118 65 53	12 3 9	8 7 1	13 9 4	14 6 8	5 2 3	5	6 5 1	17 10 7	12 5 7	8 5 3	6 4 2	9 4 5	
Chippewa	Total Males Females	200 110 90	7 4 3	9 6 3	16 9 7	15 7 8	13 4 9	6	23 11 12	24 14 10	20 9 11	14 11 3	25 15 10	20 12 8	3 2 1
Clare	Males Females	45 21 24		3 2 1	2 1 1	4 1 3	4 2 2		5 2 3	3 2 1	6 2 4	2 1 1	4 2 2	7 1 6	
Clinton	Total Males Females Unknown	232 123 107 2	17 9 7	11 6 4 1	25 12 13	16 10 6	18 8 10	6	20 7 13	25 18 7	20 10 10	20 8 12	19 13 6	29 15 14	1 1
Crawford	Total Males Females	22 9 13	3 2 1	2 2	1	1	3		6 3 3	1 3		1		1	
Delta	Males Females	187 110 77	11 7 4	8 5 3	13 7 6	16 11 5	17 10 7	10 7 3	16 11 5	22 14 8	13 6 7	18 10 8	19 8 11	24 14 10	
Dickinson	Total Males Females	197 107 90	10 5 5	12 4 8	11 7 4	17 9 8	15 1 14	10 6 4	21 11 10	36 24 12	22 15 7	18 7 11	11 9 2	14 9 5	
Eaton	Total Males Females	246 112 134	11 7 4	19 9 10	24 5 19	28 11 17	20 9 11	23 9 14	30 14 16	13 8 5	19 7 12	17 9 8	22 11 11	20 13 7	
Emmet	Total Males Females	116 70 46	7 5 2	14 9 5	9 6 3	12 8 4	10 4 6	12 7 5	11 3 8	7 2 5	8 6 2	11 8 3	11 8 3	4	::::
Genesee	Total Males Females	489 251 238	33 21 12	31 14 17	44 25 19	41 20 21	30 19 11	40 21 19	45 19 26	51 28 23	42 20 22	45 28 17	36 13 23	50 23 27	
Gladwin	Total Males Females	21 11 10		2 2	2 1 1	i	3 1 2		5 1 4	1	3 2 1	1	2 2	1 i	
Gogebie	Males Females	214 140 74	16 7 9	16 10 6	22 15 7	22 14 8	15 12 3	7	15 9 6	31 23 8	17 8 9	15 11 4	18 12 6	19 12 7	
G'd Traverse	Total Males Females	139 71 68	4 1 3	6 4 2	10 6 4	21 9 12	7 3 4		14 8 6	13 9 4	15 5 10	11 5 6	10 9 1	15 7 8	
Gratiot	Males Females	185 85 100	6 4 2	10 5 5	13 5 8	15 11 4	16 2 14	7	19 8 11	23 9 14	19 8 11	13 8 5	18 12 6	17 6 11	
Hillsdale	Total Males Females Unknown.	285 160 124 1	29 12 17	18 12 6	21 8 13	25 13 11 1	24 12 12	9	10 7 3	32 19 13	23 7 16	36 26 10	22 15 7	26 18 8	2
Houghton	Total Males Females	476 269 207	28 11 17	38 21 17	17 7 10	39 27 12	34 21 13	19	40 26 14	50 32 18	40 19 21	37 17 20	60 37 23	59 32 27	
Huron	Total Males Females	259 149 110	10	20 10 10	21 9 12	28 9 19	19 10 8	18	12 6 6	31 18 13		29 18 11	19 12 7	20 11 9	

Table 54.—CONTINUED.—Deaths returned by counties, sex and months, 1896.

							Mor	iths, 18	896.						
Counties.	Sex.	Year, 1896.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ingham	Total Males Females Unknown	380 196 181 3	26 13 13	15	37 21 16	39 19 19	30 18 12	13	21 15 6	31 17 14	39 18 21	41 16 25	34 17 15 2	29 13 16	
Ionia	Males Females	307 146 161	21 9 12	6	23 10 13	22 6 16	25 13 12	15 10 5	18 9 9	26 14 12	48 23 25	33 17 16	24 10 14	34 19 15	
Ioseo	Total Males Females	98 60 38	6 3 3	4	10 7 3	5 3 2	10 8 2	6	13 9 4	13 6 7	4 2 2	10 5 5	1	10 6 4	
Iron	Males Females	64 39 25	3	5	8 7 1	9 5 4	3 2 1	8 3 5	3 2 1	4 1 3	6 4 2	1 1	6 4 2	4 2 2	
Isabella	Total Males Females	156 81 75	8 4 4	4	14 6 8	13 7 6	10 8 2	10	7 5 2	18 6 12	18 8 10	11 5 6	13 7 6	19 11 8	
Jackson	Total Males Females	496 259 237	39 23 16	13	32 11 21	38 21 17	46 27 19	32 19 13	27 17 10	43 23 20	44 20 24	45 21 24	60 33 27	49 30 19	
Kalamazoo	Males Females	414 222 192	21 9 12	39 27 12	36 19 17	40 20 20	31 14 17	26 15 11	34 15 19	40 20 20	45 26 19	46 26 20	28 16 12	27 14 13	
Kalkaska	Total Males Females Unknown	34 17 16 1	3 2 1		4 2 2	2 2	3	5	1 i	3 2 1	3 1 2	1 1	1 1	4 2 2	
Kent	Total Males Females Unknown	1,181 638 538 5	89 46 43	54	93 46 47	124 57 67	94 54 40	73 38 35	65 30 33 2	100 59 41	102 59 43	96 57 39	116 58 57 1	130 79 50 1	1
Keweenaw	Males Females	27 16 11		2 1 1	3 1 2	7 5 2	2 2	2	2 2		2	3	3 2 1	1	
Lake	Males Females	35 17 18	4 1 3		3 2 1	1	3 2 1	1	2 1 1	3 1 2	22	3 2 1	6 1 5	7 3 4	
Lapeer	Total Males Females	205 104 101	10 7 3	8	15 6 9	11 4 7	24 13 11	16 8 8	19 12 7	15 8 7	19 12 7	8 4 4	16 7 9	34 14 20	1
Leelanau	Total Males Females	90 48 42	2 1 1	4 3 1	4 2 2	9 3 6	11 5 6	2 2	9 5 4	11 9 2	8 2 6	8 1 7	10 7 3	12 8 4	
Lenawee	Total Males Females Unknown	422 231 190 1	15 9 6	30 23 7	47 .24 23	47 23 23 1	25 10 15	32 16 16	44 25 19	30 15 15	46 23 23	36 20 16	28 18 10	40 23 17	2
Livingston	Males Females	132 70 62	10 7 3	12 8 4	14 7 7	7 4 3	14 5 9	10 4 6	9 3 6	2 2	16 9 7	11 6 5	9 6 3	16 9 7	
Luce	Males Females	33 17 16	2 1 1	4 2 2	2 2	4 3 1	1	2	2	5 1 4	5 2 3	i	i	4 3 1	

Table 54.—CONTINUED.—Deaths returned by counties, sex and months, 1896.

							Mon	ths, 1	896.						
Counties.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Mackinae	Total Males Females Unknown	69 41 25 3	9 6 3	1	6 4 2		5 2 2 2 1	3 1 2	7 2 3 9	7 4 3	10 8 2	5 2 3	5	9 6 3	1
Macomb	Total Males Females	317 166 151	19 10 9	11	18 7 11	21 12 9	25 13 12	22 14 8	28 16 12	23 16 7	28 11 17	27 12 15	36 16 20	49 28 21	
Manistee	Males Females	312 161 151	31 21 10	17 10 7	23 15 8	30 10 20	27 12 15	23 10 13	23 11 12	28 13 15	22 12 10	36 17 19	26 15 11	26 15 11	::::
Marquette	Total Males Females Unknown	553 307 244 2	34 20 14	44 26 18	53 31 21 1	50 28 21 1	37 23 14	35 21 14	65 33 32	65 40 25	38 19 19	36 19 17	48 20 28	48 27 21	
Mason	Total Males Females Unknown.	158 94 63	6 3 3		14 4 10	13 10 3	11 6 5	8 5 3	14 8 6	13 5 8	15 10 5	15 8 7	17 12 5	21 15 5	1
Mecosta	Total Males Females Unknown	154 89 64	19 10 9	7 4 3	9 6 3	16 10 6	20 12 8	12 3 9	19 13 6	10 6 4	10 7 3	12 8 4	13 6 7	6 3 2 1	1
Menominee	Total Males Females Unknown	343 195 145 3	28 15 13	27 18 9	25 15 10	37 18 19	26 18 8	26 14 11 1	33 17 15 1	33 17 16	35 19 16	14 11 3	26 12 14	33 21 11 1	
Midland	Total Males Females	108 65 43	3 2 1	7 3 4	10 7 3	9 6 3	1	8 6 2	10 5 5	15 5 10	17 12 5	11 8 3	6 4 2	11 6 5	
Missaukee	Total Males Females	46 25 21	2	4 2 2	2 1 1	6 3 3	3 1 2	5 3 2	4 1 3	5 5	6 4 2	1	4 4	2 2	
Monroe	Total Males Females Unknown	333 165 167 1	21 10 10 1	26 15 11	24 12 12	40 21 19	17 5 12	22 15 7	20 11 9	35 22 13	24 9 15	40 16 24	32 15 17	32 14 18	
Montealm	Total Males Females Unknown	292 130 161	22 12 10	26 12 14	31 11 20	27 12 15	25 9 16	24 13 11	26 15 11	23 9 14	26 13 13	26 11 14 1	20 8 12	16 5 11	
Montmorency.	Total Males Females	31 18 13	1		2 2	i	1	3 1 2	5 4 1	1	9 6 3	2	3 2 1	3	
Muskegon	Total Males Females Unknown	361 184 171 6	21 10 11	28 13 15	42 22 19 1	23 12 11	28 10 12 1	19 11 8	32 20 12	27 11 13 3	40 20 20	32 19 13	40 17 22 1	32 17 15	2
Newaygo	Males Females	111 59 52	13 7 6	3	9 5 4	9 4 5	11 8 3	7 5 2	6 2 4	7 2 5	14 9 5	12 7 5	8 3 5	10 4 6	
Oakland	Males Females	370 195 175	29 17 12	10	23 11 12	22 10 12	55 29 26	27 16 11	30 18 12	32 14 18	36 19 17	28 16 12	32 18 14	38 16 22	1 1
Oceana	Males Females	195 78 57	6 4 2	5	14 7 7	18 12 6	13 7 6	8 6 2	5 3 2	7 6 1	14 8 6	10 3 7	15 7 8	19 10 9	

Table 54.—CONTINUED.—Deaths returned by counties, sex and months, 1896.

							Mor	ths, 1	896.						
Counties.	Sex.	Year, 1896.	January.	Februa y.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ogemaw	Total Males Females	, 18 , 13 5	1	i		i	1	3 3	1	5 3 2	1		2 2	2 1 1	
Ontonagon	Males Females	56 34 22	2 1 1	9 4 5	3 2 1		7 5 2	8 4 4	3 2 1	7 3 4	5 3 9	3		6 4 9	
Osceola	Males Females	118 66 52	6 2 4	4	15 10 5	10 8 2	9 6 3	13 8 5	5 4 1	14 6 8	12 8 4	5 1 4	15 9 6	10 4 6	
Oscoda	Total Males Females	17 11 6			5 5	3 1 2	2 1 1	1 1	=	1 į	2 1 1		i	2 2	
Otsego	Males Females	39 20 19	2 1 1	3 1 2	4 3 1	4 4	2 1 1	3 1 2		i	5 3 2	3 2 1	33	9 4 5	
Ottawa	Total Males Females	321 185 136	14 11 3	14 10 4	22 10 12	26 15 11	29 14 15	27 13 14	29 19 10	24 13 11	27 20 7	41 18 23	31 19 12	35 22 13	1
Presque Isle	Males Females	36 20 16	2 2		3	1	2 2	2 1 1	6 3 3	6 4 2	5 2 3	2 2	2 1 1	5 3 2	
Roscommon	Males Females	8 5 3	i		1	1			1 i	1 	2	=	===	1	
Saginaw	Total Males Females Unknown	957 496 457 4	70 36 34	81 36 45	99 58 41	89 44 45	78 33 45	66 38 28	79 39 40	83 48 34 1	90 57 33	70 32 37 1	75 35 40	75 40 35	
Sanilae	Males Females	259 152 107	17 12 5	19 12 7	26 16 10	22 13 9	22 15 7	23 11 12	14 5 9	33 20 13	21 18 3	17 9 8	20 8 12	24 13 11	
Schoolcraft	Males Females	50 29 21	3 2 1	3	4 1 3	5 3 2	3 3	2 1 1	4 3 1	6	7 3 4	6 4 2	4 2 2	3 1 2	
Shia wassee	Total Males Females Unknown	224 114 108 2	12 6 5	11 7 4	13 5 8	13 4 9	13 3 10	14 6 7	19 6 13	34 22 12	28 17 11	17 7 10	20 13 7	29 18 11	
St. Clair	Total Males Females Unknown	441 233 207	23 11 12	23 11 12	41 25 16	36 21 15	32 12 20	29 18 11	37 22 15	51 27 23	39 21 18	41 19 22	35 17 18	52 29 23	2
St. Joseph	Total Males Females Unknown	250 138 111 1	13 7 6	20 12 8	22 12 10	30 18 12	92 9 13	18 11 6 1	19 8 11	23 12 11	21 13 8	23 14 9	14 6 8	23 14 9	
Tuscola	Total Males Females	257 112 145	13 6 7	15 9 6	20 7 13	28 15 13	14 4 10	19 7 12	19 8 11	18 10 8	32 15 17	33 13 20	21 7 14	25 11 14	
Van Buren	Total Males Females Uaknown	307 167 139	15 6 9	22 13 9	37 22 15	22 9 13	20 12 8	16 10 6	27 12 15	25 12 13	44 25 19	35 19 15 1	22 16 6	22 11 11	

							Moi	nths, 1	896.						
Counties.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Washtenaw	Total Males Females Unknown	421 236 184	29 15 14	22 10 12	38 18 20	35 21 13 1	31 22 9	20 14 6	38 20 18	33 13 20	46 25 21	54 31 23	33 22 11	42 25 17	
Wayne	Total Males Females Unknown	4,014 2,191 1,822 1	298 143 155		317 165 151 1	318 155 163	148	325 184 141	338 189 149	340 193 147	350 219 131	361 199 162		425 222 203	3
Wexford	Total Males Females Unknown_	117 62 54	9 3 6	2	10 5 5	9 6 3	12 9 3	9 2 7	6 4 2	15 8 7	7 5 2	13 5 8	9 6 3	16 9 6 1	

Table 54.—CONCLUDED.—Deaths returned by counties, sex and months, 1896.

DEATHS BY AGES, MONTHS AND SEX-DETAILED STATEMENT BY COUNTIES, 1896.

Table 54 presents the details of the returns of deaths for the months and counties by sex. Table 55 gives the deaths by counties, ages and sex. These tables were formerly united, but separation was necessary since the latter, Table 55, has been enlarged to include several additional columns of importance, viz., the deaths by ages in individual years under 5. Stillbirths are also separately stated in this table, so that their disturbing influence upon the death rates of children under 5 and of infants under 1 year may be eliminated. The study of infant mortality is chiefly occuppied with the causes of deaths of children born alive; although of great interest and importance in itself, the study of causes of stillbirths may be properly separated from it in this connection. It should be remembered that the numbers returned for each period of age for different counties may be dependent, to a large extent, upon the special age distribution of the population. Counties of the Upper Peninsula have usually a larger proportion of children and young adults than the remainder of the State; counties of the southern part of the State show a preponderance of inhabitants of advanced years, and the deaths of children returned from these parts of the State vary in like manner.

INFANT AND CHILD MORTALITY IN MICHIGAN, 1896.

In the reports for the two years preceding, tables were given at this point showing the death rates of infants under 1 year of age and of children aged from 1 to 4 years, inclusive, for each of the counties of the State. The counties were grouped, for convenience, into four divisions: (1) Counties having rates over 50 per cent above the average; counties having rates above the average, but less than 50 per cent above it; (3) counties below the average, but not 50 per cent below it; (4) counties more than 50 per cent below the average. It was found that the majority of the counties showed rates of mortality for both infants and children less than 50 per cent below

the average of the State. This average was raised especially by the larger counties of the Upper Peninsula, and by the counties containing the largest cities of the State, such as Bay, Saginaw, Kent and Wayne. Cholera infantum and other diarrheal diseases of children were largely responsible for the high infantile death rate, and these diseases are prevalent to a fearful degree in the mining cities of the Upper Peninsula, where there exists a very large proportion of foreign population, grossly ignorant, for the most part, of sanitary and hygienic requirements.

While the general indications of the tables mentioned were probably correct, and the comparative mortality of different parts of the State was fairly well indicated, as soon as more specific data were selected for study, the element of uncertainty from the unsatisfactory character of the statistics came at once into the question. The inaccuracies arose from several sources. In the first place the deaths were very imperfectly returned, the possible correction being as high as 50 or 60 per cent on the average for deaths from all causes and from all ages. The assumption might be made that the same degree of inaccuracy would affect the deaths of children reported as affected the general returns, but while this might be fairly correct, it would seem not unlikely that deaths of infants and children might be omitted in larger proportion in the sparsely settled portion of the State, among the foreign-born inhabitants of the cities, and, in general, where registration was comparatively imperfect or difficult, than in the thickly settled communities of the southern part of the State.

A second source of error was the very unsatisfactory basis of reference in stating ratios of infant and child mortality. What is known as infant mortality, as used by statisticians and sanitarians, is the ratio of deaths of infants under one year of age to living births. The ratio of deaths to population under one year of age, corresponding to the death rates employed for all ages and for other individual years and groups of years, is very properly discredited for ages under one year, owing to the very great difficulty of obtaining an accurate census enumeration of this age. Comparisons were made, however, using the infant death rates instead of the infant mortality, and it was found that the arrangement of counties was very nearly the same for the deaths of infants under one year as it was for children aged from one to four years.

In the present Report it did not seem advisable to continue these calculations, as in a very short time thoroughly reliable mortality data, based on certificates of death, will be available for use in this connection. There will still be wanting, however, reliable returns of births to serve as a basis of comparison, and it is the special purpose of these remarks to urge the necessity of such returns on account of their value in the study of the deaths of infants. By establishing a reliable system of registration of deaths, our rates of infant mortality would be at once available for comparison with all States and countries possessing reliable registration, just as our general mortality statistics were raised to this position by the law providing for the immediate registration of deaths which took effect on August 29, 1897. A satisfactory law for the registration of births is thus a necessary complement to the law providing for the immediate registration of deaths, in order that the data obtained under the latter may be properly stated for sanitary use.

		Total		A	ges	Ages in years.	ars.								A	ges	n fiv	e-ye	Ages in five-year periods	fods.						
State and counties.	Sex.	deaths at all ages 1896.*	Still- born.	Under 1 year.+		ol	60	4	Under 5 years.†	10 30	524	15 25	82%	8 28	35.38	855 B	624	656	834	18 2 9 9	835	\$ 38	534	635	80 and over	Unk
State	Total Males Females	21,983 11,807 10,119 57	1,254 687 520 47	4,098 2,313 1,780 5	2544 268	8888	1505	138	6,035 3,817 2,713	86.58	59 653	347	9889	1 462 3	346 336	353 353 553 553 553 553 553 553 553 553	587 721 359 378 328 343	18 859 18 393 18 393		358	1000	1,139 645 494	1.238 708 530	1,102 653 449	1.85 888	260 107 107
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Berrien	Total Males Females	387 902 971 8	7000	46 29 17	2,4	400-	0044	10 05 00	1.48	10 × 20	001-	82	9-6	808	5 ∞∞ ;	822	1-10 01	121-00 ;	400	53 co 10	825∞	1188	855	1381	882	
Branch	Total		420	21 10 11	62 63	4.35.03	- -	eo ← es	35 16 16	9-10	40101	F-102-4	0.410	00 44	5 87	1-00-4	3500	65 65 	5300.00	Sint	8500	8121-	200	138	22 133	
Calhoun	Males Females	238 170 5	28.04	1184	000001	10 00 01	0303	0303	2882	5000	= 14.0	000	12:02	P-0310	42.2	345	01-10	50 m €	1000 j	221-	8880	6118	328	888	825	
Cass.	Total	888	000	37 16 16	000010	60-05	111	- -	382	61	£~ 00 चा	0.40	6 85 4	10 03 03	29	4-00	10 05 00	00 00 10	⊕ +10	\$ m	= 00 00	5100	6100		7 × 0	
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Cheboygan	Total		21 C 22	255	000		!	63 63	813		0)	00.05.00	00-05	10.01 00	65 65	60 63	0 ro -	63	1-10 03	10.4 →	1044	4-8	9000		400-	
	Total	Gr.	640	24.24	72.01	400-	eo → 55	- -	888	000	10-4	2002	P-400	98-	040	10 01 00	10 60 05	704-	400-	00	1-8-	00 05	1-1003		F-400	
Clare	Total	422	01	5 r &	111	01	111	111	786		10 00 03	- -	05 05	60 GS	01 01	111		111	400-	05.03				- -	63 63	
Olinton	Males Females	88 90 90 90 90 90 90 90 90 90 90 90 90 90	5386	223	10 05 00	4-00	[]	1111	387 -	0000	F-400	10-4	1900	584	P 03 10	040	000000	4-100	Ø 65 42	1-0310	55.70	23.0	81.2×	250	582	
Crawford	Total Males	810.83	01 01	40 to 20	111	65		111	970.4	- -	-	111	111	- -	- -	05 05	111	111	- -				0101			

Table 55.—Continued.—Deaths by counties, by sex, by ages and five-year periods of age, 1896.

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	Under 5 years.†	248	882	31 17 14	828	283	బెగాయ	117 71 46	ខ្លួន	& 50 K	35 14 14	212 128 84
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Ag	Under 1 year.†	823	27.28	21 81 9	30 13 17	888	အ ၈၈	25.22	21 15 6	23 10 15	81,15 ∞	#8 2
	Still- born.	22 10	4.3133	0.4°C	460-	25 cm	- -	13 au - 3	27-1	24-	1-014-	18
Total	deaths at all ages, 1896.*	187 110 110	761 701 90	246 112 134	116 65 84	489 251 238	21 10	214 140 74	139 71 68	£885	88821	269 269 207
	Sex.	Total Males	Total Males	Total Males Females	Total Males	Total	Total Males Females	Total Males Females	Total Males Females	Total Males Females	Total Males Females	Total Males
	Countles	Delta	Diçkinson•	Eaton	Emmet	Genesee	Gladwin	Gogebic	G'd Traverse.	Gratiot	Hillsdale	Houghton

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Ingham	Total Males Females	380 196 181 3	850-	20 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	400	00 00		01 01	688a	0104	000010	145	400	505	00 44	80 53	9-12	1-024	121	2=2	81221	81==	- 1		1100	30 11 11 8 11 8
Ionia	Total Males	307 146 161	15 co	813	040	240	- -	20 00	988	63 65 →	w → 03	800	840	500	53400	13	202	6000	F86	55.4.00	17 x 1-	75.61			25.58	25 28 25 28 27 28
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Iron	Total Males	188	16.0	7887-	00 00	111	111	25	801	!	01	111	0101	20 05	010	40101	65	61	02 mm	111	20 03					
Isabella	Total Males Females	156 75	0401	829	040	65 63	- -	400-	587	00 4 4	4-100	10 60 01	900	∞ -1-	10 05 00	F-0310	4.03.05	10 03 00	=-+	10 00 01	00000	00 01		40105		00 NO 60
Jackson	Total Males	498 259 237	£ 40	888	20-4	540	504	10 03 00	96 51 45	84.0	55,00	8-5	3-=	71-0	50.0	8-12	50 m	200	92 17	8500	1288	138		8533	V- 516	88 17
Kalamazoo	Total	198	200	5585	00 44	00 05 H		- -	1888	60 05	00000	9-16	500	800	858	F00	880	810	816	90 6	25.8	855	-	877		223
Kalkaska	Total Males Females	34 17 16	104 1-	es → eş	os			- -	00 00 10	- -	1111	- -		[]	1111	00 05	03 03	0003-	!!			!!		!	1 1	- -
Kent	Males Females	1,181 638 538 5	2844	214 124 89	133	20°C	000	5100-4	288 169 118	25 62	138	813	3338	878	888	1000	888	488	1232	2882	882	2942		282	1	786
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Lake	Total	35 17 18	4000	00 वा वा		111	111	01	11 6	111	03.03	111	4-60	81	111	00-03	111	Ul	111	01	22-1-				111	111

		Total		AB	ges in years	year	σĎ								Ages	es in	five	-yea	in five-year periods.	lods.						
Countles	Sex.	deaths at all ages, 1896,*	Still- born.	Under 1 year.+	104	ci	9	4 D Y	Under 5 years.†	10 S 01	534	555	84.50 24.50	25 3 29, 3 3 t	36. 35 34. 39.	854 454	\$3¢	555	59.05		85 th	838	52.57	55 5 E	80 and over	
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Lenawee	Total Females Unknown	183 190 1	1361	25 4 1 1 2 2 2	1-400	400-	!!	0303	&8%	01-01	1-10 01 i	8550	200		880	201-	004	854	888		822	200	8126	186	2882	
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Macomb	Males	317 166 151	940	2002	300 ss	400-	9-10	916	548	5r-0	1-0110	200-	120	1642	2-9	200	500	5-00-4		0.00	502	889	201 0	30	822	
Manistee	Males	312 161 151	8218	33 48 83	8122	71-1-	99 !	00.00	133	2 x x	53.400	F-85.4	400	200	20 8 20 8	61	2010.00	4-0		t-10 01	8000	10 00 01	40101	0.410	00 4 4	
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Mason	Males Females	158 29 20 1	¥5.00-	1198	=∞00	4-0	1111	40-	28.25	2010	10-4	0001-	0000	e2 − e3	4 4	10 ∞ 01 G 4 10	-9-			44	tripot !	2000	6000	מימו	910-	

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Males Females Unknown	Total Males Females	Total	Total	Total Males Females Unknown	Males Females	Total	Total Males Females	Total	Total	Total	Total Males	ncluded.
Mecosta	Menominee	Midland	Missaukee	Monroe	Montcalm	Montmorency.	Muskegon	Newaygo	Oskiand	Oceans	Одешам	+ Stillbirths included.

		Total		A	ses	Ages in years.	ars.	1							¥	ses	n Av	Ages in five-year	ar p	periods.	*				
Counties.	Sex	deaths at all ages, 1:96.*	Still- born.	Under 1 year.+		ol	ಣೆ	4	Under 5 years.†	10 gai	334	55 CE 190 CE	824	826	824	8558	334	55 55 50 55 50 55	54.	50.00	64.5	8 3 %	537	636	80 and over.
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Osceola	Total	118 66 52	1	22.	1001	03			220	465-	400-	60.03-	10 05 00	10 - 4	65 63 →	60 60	F- 400	44	2 4t-	F-00-4	48-	1.00	63 63	400-	000
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Ottawa	Total	321 185 136	2161-	685	300	53×4	400-	}	5.88	2044	00 10 00	4-00	582	53 xx 4	0.00	9000	0044	\$-00 et	0 to 62	8118	404	2000	24 18 16	877.8	Figu
Presque Isle	Males	98 90 16	o2	5700			[96	111	!		00 03	111	111	- 1-		111	- -	03		01 01	∞ + 0)		0101
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St. Clair	Males Females	488 708 1	£ 4.8-1	622	202	0.04	E014		110 51 59	2000	51010	250	- 20 c	5000 i	121-00 ;	87-1	00000	E0.0	5504	- 1	816-	821	16.23	82.21∞	8518		1503
St. Joseph	Males Females	138	⊕ 8001 −	850	104-1		w	- -	881		1-10-01	0000	2000	540	10-4	F-00-4	0401	1-0110	201r		1100	6128	514	850	884		864 :
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Van Buren	Total Males Females	307 167 139	848-	11.13	Z =	0005-	01	01	72.25	084	0.403	5100	55.00	4 cm		01 10	40101	0044	822		5 re re	20 m	981-	38	25x	1	125 i
Washtenaw	Total Males Females	421 184 184	1 36	28 28 T	F-400	5-400	65-65	0509	1.88	104-1	100500	5000	B-3	872 :	5000	Srare !	G-410 !	7.01	504	1	1201	821	822	427	883		888
Wayne	Total Males Females	4,014 2,191 1,822	268 144 124	924 524 400	103	25 E	844	322	1.411 776 688	52.5	2.28	8128	98 11 11 11 11 11 11 11 11 11 11 11 11 11	188	888	588 :	884	525	28 to 1		884	55 55	157 86 71	153	515		表 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Wexford	Total Males Females	7.82	968-	8312	02.03		05.05		584	0000	00 00	040	D 2014	5-10	8-01	62-63	w-w ;	00 00	m m	1 1	- -	1-004	∞ – 63	00 10 00	60 00		60.01-

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Table 56.—Exhibiting, by sex, and by ages in periods of years, the number of persons returned as having died in Michigan during the year 1896. (Stillbirths included.)

								Mont	hs, 18	896.					
Ages in periods of years.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
All ages	Total Males Females Unknown	21,983 11,807 10,119 57	1,434 750 681 3	1,558 848 707 3	1,819 949 865 5	1,918 992 921 5	1,672 865 804 3	1,585 876 703 6	1,775 957 812 6	2,071 1,151 913 7	2,057 1,146 911	1,938 1,030 904 4	1,915 1,027 882 6		56 30 23
Stillbirths	Total Males Females Unknown	1,254 687 520 47	86 42 41 3	86 49 35 2	99 51 44 4	112 57 51 4	106 62 41 3	95 53 37 5	100 56 38 6	97 55 36 6	108 54 54	102 56 42 4	120 64 52 4	138 85 48 5	3
Under 1*	Total Males Females Unknown	4,098 2,313 1,780 5	193 105 88	256 143 112 1	292 160 132	286 156 129 1	291 164 127	274 151 123	411 240 171	563 308 255	472 284 188	330 169 161	343 202 139 2		
Under 5*	Total Males Females Unknown	6,035 3,317 2,713 5	320 169 151	388 210 177	431 227 204	442 239 202 1	428 233 195	411 226 185	559 317 242	744 406 338	656 382 274	513 257 256	530 303 225 2		1
Under 1†	Total Males Females Unknown	5,352 3,000 2,300 52	279 147 129 3	342 192 147 3	391 211 176 4	398 213 180 5	397 226 168 3	369 204 160 5	511 296 209 6	660 363 291 6	580 338 242	432 225 203 4	463 266 191 6	524 315 203 6	4 1
Under 5+	Total Males Females Unknown	7,289 4,004 3,283 52	406 211 192 3	474 259 212 3	530 278 248 4	554 296 258 5	534 295 236 3	506 279 222 5	659 373 280 6	841 461 374 6	764 436 328	615 313 298 4	650 367 277 6	746 432 308 6	10
5 to 9	Males Females	768 403 365	50 30 20	54 28 26	49 19 30	66 43 23	43 18 25	52 33 19		63 41 22	71 34 37	87 45 42	85 42 43	93 42 51	
10 to 14	Males Females	523 264 259	35 14 21	38 15 23	49 26 23	37 19 18	45 22 23	30 18 12	51 28 23	46 19 27	49 28 21	50 23 27	46 24 22	46 28 18	
15 to 19	Total Males Females	759 347 412	34 16 18	46 18 28	76 35 41	84 42 42	65 32 33	49 20 29	62 29 33	70 35 35	82 35 47	58 28 30	51 18 33	82 39 43	
20 to 24	Males Females	959 393 566	61 18 43	76 40 36	65 25 40	80 34 46	93 21 72	66 29 37	77 42 35	98 44 54	93 48 45	76 31 45	76 29 47	96 31 65	1
25 to 29	Males Females	875 413 462	55 29 26	65 35 30	101 40 61	87 39 48	74 33 41	60 29 31	66 28 38	91 47 44	51 26 25	76 43 33	73 29 44	73 33 40	2 1
30 to 34	Males Females	745 349 396	64 29 35	40 16 24	59 28 31	61 30 31	71 31 40	70 37 33	66 31 35	60 28 32	72 37 35	59 30 29	51 24 27	71 28 43	1
35 to 39	Total Males Females	786 353 433	76 37 39	60 32 28	69 28 41	75 28 47	51 20 31	56 25 31	64 29 35	51 24 27	61 23 38	81 38 43	77 43 34	65 26 39	
40 to 44	Total Males Females	687 359 328	28 21 7	53 24 29	59 37 22	74 30 44	64 35 29	46 25 21	42 22 20	59 26 33	58 29 27	69 29 40	53 26 27	83 54 29	1
45 to 49	Males Females	721 378 343	53 22 31	45 27 18	71 45 26	84 43 41	52 28 24	54 32 22	50 26 24	71 41 30	60 26 34	62 33 29	46 21 25	69 32 37	92 92

^{*} Stillbirths not included.

⁺ Stillbirths included.

Table 56.—CONCLUDED.—Deaths by periods of age, sex and months.

							Mo	nths,	1896.						
Ages in periods of years.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November,	December.	Unknown,
50 to 54	Total Males Females	859 466 393	57 29 28	80 49 31	71 37 34	91 50 41	61 28 33	71 36 35	61 26 35	71 35 36	68 40 28	69 39 30	64 42 22	93 55 38	
55 to 59	Total Males Females	852 494 358	62 28 34	57 35 22	73 45 28	82 44 38	60 33 27	57 35 22	69 37 32	77 44 33	81 54 27	70 48 22	75 41 34	87 48 39	2
60 to 64	Males Females	1,044 638 406	78 42 36	77 41 36	86 50 36	85 51 34	91 54 37	75 43 32	85 48 37	77 50 27	111 75 36	103 65 38	83 53 20	91 55 36	1 1
65 to 69	Males Females	1,139 645 494	96 55 41	83 52 31	86 54 32	112 57 55	91 48 43	83 49 34	81 53 28	89 48 41	101 60 41	104 56 48	98 49 49	115 64 51	=
70 to 74	Males Females	1,238 708 530	80 43 37	87 58 29	106 53 53	108 62 46	92 55 37	86 50 36	109 61 48	99 66 33	122 70 52	119 64 55	110 57 58	117 66 51	20
75 to 79	Males Females	1,102 658 449	76 47 29	98 48 50	109 58 51	101 56 45	69 38 31	86 55 31	79 44 35	95 69 26	76 49 27	93 58 35	108 58 50	110 72 38	2 1 1
80 to 84	Males Females	781 444 337	57 38 19	68 42 26	57 35 22	72 34 38	54 33 21	78 41 37	41 22 19	57 38 19	71 37 34	71 44 27	83 50 33	71 30 41	1
85 to 89	Males Females	409 249 160	28 15 13	20 11 9	62 39 23	31 13 18	29 20 9	31 22 9	24 14 10	26 15 11	32 19 13	49 35 14	40 25 15	37 21 16	
90 to 94	Males Females	139 71 68	14 10 4	10 4 6	18 4 14	10 7 3	8 6 2	10 7 3	7 1 6	13 9 4	7 2 5	9 1 8	17 8 9	15 12 3	1
95 to 99	Males Females	39 23 16	3 2 1	4 2 2		1	4 3 1	3 3	2 1 1	4	6 3 3	2	9 3 6	1	
100 and over.	Males Females	9 5 4	1	1		1			i	=	1	1 1	2 1 1	1	
Unknown	Total Males Females Unknown	260 148 107 5	20 13 7	22 11 11	23 13 9 1	22 12 10	21 12 9	16 8 7 1	24 14 10	13 7 5 1	22 14 8	15 7 8	18 7 11	23 17 6	21 13 6 2

Tables 56 and 57 give details in regard to the number of persons of each sex who died at all ages during each month of the year 1896. Table 56 is condensed from Table 57, and states the ages in periods of five years. Table 58 gives the number for each year of age separately, and also the number of deaths at each month of age for children dying under the age of one year. These tables, as printed in the present Report and those for several years preceding, differ from those previously published in that the number of stillbirths is separately stated, and the number of deaths under one year of age, and also under five years of age, is stated both inclusive and exclusive of stillbirths. The former statement is made in order that the data may be readily comparable with former Reports; the latter, because for many purposes it is important to eliminate stillbirths, as, when included, they unduly increase the number of deaths for the first month and for the first year of age as compared with those of subsequent years.

Table 57.—Exhibiting, by sex and by months, the number returned as having died in Michigan during the year 1896, at each and every age, the age stated in twelfths of a year for those under one year, and in years for those over one year of age. (Stillbirths included.)

							Ŋ	fonths	s, 1896.						
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April.	Мау.	June.	July.	August.	September.	October.	November.	December.	Unknown.
All ages	Total Males Females Unknown	21,983 11,807 10,119 57	1,434 750 681 8	1,558 848 707	1,819 949 865 5	1,918 992 921 5	1,672 865 804 3	1,585 8.6 703 6	1,775 957 812 6	2,071 1,151 918 7	2,057 1,146 911	11.030	1,915 1,027 882 6	2,185 1,186 993 6	30 23
Stillbirths.	Total Males Females Unknown	1,254 687 520 47	86 42 41 3	86 49 35 2	99 51 44 4	112 57 51 4	106 62 41 8	95 53 37 5	100 56 38 6	97 55 86 6	108 54 54	56	64	138 85 48 5	3
Under 1-12*	Total Males Females Unknown	1,433 834 595 4	76 44 32	102 59 42 1	125 68 57	124 76 48	123 66 57	86 46 40	109 72 37	124 72 52	144 87 57	123 73 50	138 78 58 2	159 93 65 1	
Under 1-12+	Total	2,687 1,521 1,115 51	162 86 73 3	188 108 77 3	224 119 101 4	236 133 99 4	229 124 98 3	181 99 77 5	209 128 75 6	221 127 88 6	252 141 111	225 129 92 4	258 1 4 2 110 6	297 178 113 6	3
1-12	Total Males Females Unknown.	421 232 188 1	24 9 15	24 16 8	32 16 16	29 12 16 1	24 11 13	33 20 13	43 23 20	43 25 18	54 34 20	21	39 24 15	38 20 18	1
2-12	Total Males Females	341 192 149	11 5 6	19 12 7	20 8 12	21 10 11	24 16 8	28 17 11	34 16 18	52 32 20	46 29 17	35 18 22	25 14 11	26 20 6	
3-12	(Total Males Females	350 204 146	16 7 9	21 14 7	17 10 7	14 9 5	28 19 9	22 14 8	40 25 15	65 33 32	38 26 12	29 12 17	27 13 14	33 22 11	
4 -12	(Total Males Females	287 163 124	18 11 7	20 14 6	5 2 3	22 9 13	14 7 7	22 14 8	41 21 20	50 28 22	32 22 10	19 8 11	22 14 8	22 13 9	3
5-12	Males Females	250 143 107	9 5 4	16 6 10	14 10 4	9 5 4	12 9 3	21 11 10	33 20 13	47 26 21	35 18 17	19 10 9	17 11 6	18 12 6	
6-12	(Total Males Females	270 158 112	10 5 5	12 8 4	20 15 5	13 6 7	11 8 3	14 4 10	36 21 15	48 26 22	35 18 17	18 8 5	29 22 7	29 17 12	٠,
7-12	(Total Males Females	178 95 83	5 2 3	10 4 6	14 8 6	18 8 10	8 3 5	9 6 3	17 7 10	26 11 15	29 21 8	7	10	16 8 8	3
8-12	Total Males Females	152 69 83	3 3	6 2 4	9 1 8	11 7 4	11 7 4	8 4 4	15 7 8	36 18 18	16 3 13	4	4	17 9 8	
9-12	Total Males Females	164 94 .70	10 7 3	13 3 10	13 6 7	15 8 7	15 7 8	9 5 4	17 13 4	27 17 10	16 10 6	9	4	9 5 4	
10-12	(Total Males Females	141 67 74	9 6 3	7 3 4	13 8 5	8 5 3	11 4 7	9 4 5	14 7 7	26 10 16	13 9 4	3	9 3 6	10 5 5	
11-12	Total Males Females	111 62 49	2 1 1	6 2 4	10 8 2	2 1 1	10 7 3	13 6 7	12 8 4	19 10 9	14 7 7	1	5	9 6 3	B

^{*} Stillbirths not included.

⁺ Stillbirths included.

Table 57.—CONTINUED.—Deaths by ages, sex and months.

							М	onths,	1896.	1					
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
1	Males Females	884 446 438	46 24 22	61 33 28	62 28 34	69 33 36	65 28 37	69 36 33	82 40 42	115 62 58	86 50 36	72 33 39	74 38 36	81 41 40	22
2	Males Females	485 265 220	36 17 19	31 15 16	34 19 15	42 27 15	35 21 14	31 15 16	39 23 16	33 18 15	47 21 26	46 24 22	48 30 18	62 35 27	
3	{ Total Males Females	305 155 150	24 14 10	20 8 12	25 11 14	21 13 8	16 6 10	23 17 6	17 8 9	18 11 7	24 12 12	30 12 18	40 22 18	46 21 25	
4	Males Females	263 138 125	21 9 12	20 11 9	18 9 9	24 10 14	21 14 7	14 7 7	10 6 4	15 7 8	27 15 12	35 19 16	25 11 14	33 20 13	١.,
5	Males Females	191 108 83	13 7 6	12 5 7	11 5 6	15 12 3	8 4 4	13 8 5	17 8 9	13 9 4	21 13 8	28 16 12	22 10 12	18 11 7	
6	{ Total Males Females	192 97 95	12 7 5	13 6 7	10 4 6	15 9 6	12 4 8	8 4 4	10 6 4	17 10 7	19 8 11	27 14 13	19 13 6	30 12 18	
7	Males Females	136 65 71	10 6 4	8 5 3	8 5 3	16 8 8	9 4 5	15 7 8	12 6 6	6 3 3	9 4 5	13 7 6	18 6 12	12 4 8	l
8	{ Total Males Females	139 75 64	9 5 4	14 8 6	12 2 10	12 7 5	7 3 4	6 5 1	6 4 2	13 11 2	13 6 7	16 8 8	15 7 8	16 9 7	
9	Total Males Females	110 58 52	6 5 1	7 4 3	8 3 5	8 7 1	7 3 4	10 9 1	10 4 6	14 8 6	9 3 6	3	11 6 5	17 6 11	
16	Males Females	105 64 41	7 5 2	9 6 8	5 2 3	8 3 5	9 7 2	6 3 3	13 10 3	9 3 6	8 5 3	12 5 7	5 2	12 10 2	1.
11	Males Females	92 54 38	4 3 1	2 1 1	7 3 4	8 5 3	11 5 6	3	7 6 1	10 6 4	8 6 2	5 2 3	10 6 4	17 8 9	
12	Total Males Females	117 62 55	9 4 5	10 6 4	. 7 5 2	6 3 3	8 4 4	7 4 3	13 6 7	13 5 8	9 5 4	14 10 4	11 4 7	10 6 4	
13	Total Males Females	84 33 51	7 1 6	9 1 8	8 3 5	6 4 2	8 2 6	3	10 3 7	6 3 3	11 6 5	8 2 6	7 4 3	1	
14	Total Males Females	125 51 74	8 1 7	8 1 7	22 13 9	9 4 5	9 4 5	11 5 6	8 3 5	8 2 6	13 6 7	11 4 7	11 5 6	6 3 3	
45	{Total Males Females	126 66 60	6 3 3	7 2 5	11 9 2	11 6 5	8 5 3	3 1 2	- 9 5 4	15 7 8	10 6 4	17 9 8	8 3 5	21 10 11	1
16	Total Males Females	120 51 69	3 2 1	9 6 3	16 6 10	16 8 8	4 1 3	11 4 7	14 5 9	6 2 4	7 4 3	10 4 6	3	15 6 9	0
17	Total Males Females	160 68 92	9 5 4	8 2 6	11 3 8	- 16 6 10	11 5 6	8 6 2	12 6 6	27 12 15	24 6 18	4 3 1	10 2 8	20 12 8	0.
18	Total Males Females	169 83 86	8 3 5	9 4 5	19 12 7	18 9 9	29 13 9	17 5 12	13 7 6	12 7 5	22 9 13	10 5 5	13 7 6	6 2 4	

Table 57.—CONTINUED.—Deaths by ages, sex and months.

							M	onths,	1896.					
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.
19	Males Females	184 79 105	8 3 5	13 4 9	19 5 14	23 13 10	20 8 12	10 4 6	14 6 8	10 7 3	19 10 9	17 7 10	11 3 8	20 9 11
20	Males Females	178 65 113	10 4 6	11 4 7	13 6 7	22 6 16	20 4 16	5 2 3	9 4 5	17 9 8	19 12 7	15 3 12	14 4 10	22 6 16
21	Males Females	200 83 117	13 4 9	22 15 7	9 1 8	17 11 6	19 4 15	9 7 2	10 6 4	22 11 11	25 8 17	12 5 7	18 4 14	24 7 17
22	Total Males Females	185 73 112	15 5 10	10 6 4	16 3 13	15 7 8	22 5 17	12 6 6	22 12 10	21 7 14	14 9 5	12 5 7	7 3 4	19 5 14
23	Males Females	213 86 127	10 2 8	18 7 11	17 8 9	18 8 10	13 3 10	17 6 11	20 10 10	19 8 11	24 12 12	19 10 9	17 7 10	21 5 16
24	Males Females	183 86 97	13 3 10	15 8 7	10 7 3	8 2 6	19 5 14	23 8 15	16 10 6	19 9 10	11 7 4	18 8 10	20 11 9	10 8 2
25	Males Females	164 83 81	6 4 2	14 9 5	21 9 12	15 9 6	12 5 7	11 6 5	9 2 7	19 10 9	10 5 5	18 11 7	17 7 10	11 5 6
26	Total Males Females	186 94 92	15 9 6	18 7 11	18 11 7	18 7 11	18 9 9	15 7 8	16 8 8	21 11 10	6 5 1	15 8 7	16 6 10	10 6 4
27	Males Females	168 69 99	11 6 5	11 7 4	20 6 14	22 6 16	12 3 9	8 5 3	12 7 5	18 9 9	12 5 7	15 8 - 7	13 3 10	14 4 10
28	Males Females	205 88 117	13 4 9	12 5 7	26 9 17	20 11 9	16 8 8	13 4 9	20 8 12	24 10 14	13 5 8	12 8 4	12 5 7	24 11 13
29	Males Females		10 6 4	10 7 3	16 5 11	12 6 6	16 8 8	13 7 6	9 3 6	9 7 2	10 6 4	16 8 8	15 8 7	14 7 7
30	Males Females	130 54 76	15 4 11	5 2 3	11 5 6	14 7 7	12 5 7	12 6 6	10 6 4	13 4 9	8 3 5	-12 6 6	8 4 4	10 2 8
31	Males Females	62	8 3 5	10 4 6	7 2 5	4 3 1	15 6 9	21 11 10	15 6 9	14 8 6	13 6 7	5 2 3	11 4 7	18 7 11
32	Total Males Females	166 85 81	16 11 5	8 2 6	16 9 7	13 6 7	14 7 7	10 6 4	13 7 4	15 6 9	22 13 9	13 7 6	11 5 6	17 6 11
33	Males Females	76	12 7 5	10 4 6	10 7 3	12 6 6	17 9 8	13 7 6	15 7 8	9 6 3	16 8 8	19 8 11	2 5	14 5 9
34	Males Females	153 72	13 4 9	7 4 3	15 5 10	18 8 10	13 4 9	14 7 7	15 5 10	9 4 5	13 7 6	10 7 3	14 9 5	12 8 4
35	Males Females		9 7 2	13 5 8	18 6 12	15 10 5	7 3 4	14 8 6	14 9 5	14 8 6	21 8 13	18 10 8	23 11 12	10 3 7
36	Males Females	168 73 95	13 4 9	16 12 4	12 6 6	14 4 10	9 2 7	9 4 5	20 9 11	13 6 7	14 2 12	20 10 10	15 8 7	13 6 7

Table 57.—CONTINUED.—Deaths by ages, sex and months.

							М	onths,	1896.						
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Thirnown
37	Total Males Females	146 70 76	26 10 16	15 7 8	11 5 6	10 3 7	17 8 9	7 5 2	8 5 3	8 4 4	6 3 3	14 8 6	11 7 4	13 5 8	-
38	Total Males Females	164 63 101	16 10 6	6 1 5	17 6 11	18 6 12	12 5 7	14 4 10	10 3 7	10 4 6	10 5 5	16 4 12	16 8 8	19 7 12	1
39	Males Females	132 59 73	12 6 6	10 7 3	11 5 6	18 5 13	6 2 4	12 4 8	12 3 9	6 2 4	10 5 5	13 6 7	12 9 3	10 5 5	1
40	Males Females	155 77 78	2 1 1	11 4 7	11 6 5	18 3 15	17 7 10	15 11 4	8 6 2	10 6 4	12 8 4	16 5 11	17 8 9	18 12 6	2 _
41	Total Males Females	107 61 46	6 5 1	11 7 4	11 7 4	8 5 3	10 6 4	4 1 3	7 4 3	11 4 7	12 6 6	11 6 5	6 5 1	10 5 5	-
42	Males Females	159 86 73	6 4 2	11 8 3	11 7 4	16 9 7	15 8 7	10 6 4	10 3 7	16 7 9	11 5 6	18 5 13	13 7 6	21 16 5	3
43	Males Females	137 68 69	11 8 3	13 4 9	14 10 4	16 4 12	14 9 5	8 3 5	9 4 5	11 3 8	6 3 3	10 5 5	8 2 6	17 13 4	3
44	Males Females	129 67 62	3 3	7 1 6	12 7 5	16 9 7	8 5 3	9 4 5	8 5 3	11 6 5	15 7 8	14 8 6	9 4 5	17 8	
45	Males Females	159 80 79	8 4 4	8	17 10 7	19 7 12	9 4 5	8 2 6	7 2 5	17 9 8	21 11 10	12 6 6	16 9 7	15	
46	Males Females	138 79 59	. 13 3 . 10	9 4 5	12 11 1	14 9 5	9 5 4	12 9 3	10 5 5	13 11 2	14 4 10	17 8 9	5 1 4	10 9) _
47	Total Males Females	151 77 74	13 7 6	.8 5 3	13 8 5	19 11 8	11 6 5	13 7 6	9 4 5	12 6 6	12 4 8	13 6 7	7 4 3	19 8 11	3
48	Males Females	132 71 61	7 2 5	11 6 5	14 7	17 9 8	11 7 4	13 10 3	15 9 6	13 6 7	5 3 2	6 4 2	9 3 6	11 5	5 -
40	Males Females	141 71 70	12 6 6	.9 4 5	15 9 6	45 7 8	12 6 6	8 4 4	9 6 3	16 9 7	8 4 4	14 9 5	9 4 5	14 3 11	3 _
50	Males Females	180 109 71	10 6 4	15 10 5	14 8 6	18 9 9	14 7 7	14 9 5	9 2 7	14 9 5	15 8 7	14 10 4	17 12 5	25 19 6) -
51	Total Males Females	138 79 59	7 3 4	13 8 5	12 8 4	13 8 5	9 5 4	8 6 2	11 6 5	13 6 7	13 8 5	12 7 5	8 5 3	19 9 10	-
52	Total Males Females	174 94 80	12 6 6	24 15 .9	13 5 .8	18 12 6	13 6 7	9 5 4	19 11 8	12 6 6	10 7 3	16 6 10	14 10 4	14 5 9	-
58	Males Females	168 81 87	15 4 11	.8 .3 5	11 -3 8	24 11 18	7 3 4	18 11 7	13 4 9	15 7 8	12 8 4	12 6 6	11 5 6	22 16 6	3
54	Total Males Females	199 103 96	13 10 3	20 13 7	21 13 8	18 10 8	18 7 11	22 5 17	9 3 6	17 7 10	18 9 9	15 10 5	14 10 4	13 6 7	-

Table 57.—CONTINUED.—Deaths by ages, sex and months.

							М	onths	1896.						
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
55	Total Males Females	159 85 74	8 1 7	10 6 4	12 10 2	9 9 13	8 2 6	9 5 4	17 9 8	14 6 8	16 10 6	13 11 2	16 7 9	14 9 5	
56,	Total Males Females	179 117 62	19 14 5	7 4 3	9 6 3	15 11 4	14 10 4	12 9 3	11 6 5	20 11 9	22 16 6	13 11 2	14 9 5	22 9 13	1
57	Males Females	156 91 65	12 4 8	12 5 7	22 14 8	8 4 4	12 6 6	10 7 3	14 8 6	17 13 4	12 8 4	10 7 3	10 5 5	16 9 7	1
58	Total Males Females	199 105 94	14 5 9	12 6 6	18 11 7	21 9 12	12 7 5	17 8 9	16 8 8	17 9 8	18 13 5	19 12 7	20 10 10	15 7 8	1.
59	Males Females	159 96 63	9 4 5	16 14 2	12 4 8	16 11 5	14 8 6	9 6 3	11 6 5	9 5 4	· 13 7 6	15 7 8	15 10 5	20 14 6	
60	Males Females	126	12 8 4	16 11 5	16 7 9	11 10 1	14 7 7	16 7 9	19 13 6	17 8 9	18 11 7	23 13 10	23 18 5	18 13 5	
61	Males Females	135 77 58	20 11 9	8 4 4	9 6 3	10 4 6	14 8 6	6 5 1	14 6 8	7 4 3	12 8 4	19 12 7	7 6 1	9 3 6	
62	Males Females	128	10 5 5	16 5 .11	15 11 4	24 14 10	18 11 7	20 12 8	15 10 5	10 6 4	37 25 12	15 10 5	15 13 2	12 5 7	
63	Males Females	153	16 8 8	23 17 6	23 12 11	20 10 10	26 14 12	20 14 6	20 '9 11	20 16 4	23 14 9	25 15 10	18 14 4	21 10 11	
64	Males Females	154	20 10 10	14 4 10	23 14 9	20 13 7	19 14 5	13 5 8	17 10 7	23 16 7	21 17 4	21 15 6	20 12 8	31 24 7	
65	Males Females	233 127 106	23 16 7	18 9 9	17 7 10	25 14 11	25 11 14	22 13 9	15 10 5	17 10 7	18 9 9	16 8 8	16 8 8	21 12 9	
66	Males Females	233	20 11 9	19 13 6	17 14 3	23 15 8	4 1 3	10 8 2	17 7 10	20 6 14	17 10 7	27 17 10	25 12 13		1
67	Males Females	218 126 92	21 11 10	13 9 4	16 11 5	25 9 16	20 12 8	17 8 9	17 14 3	17 16 1	19 11 8	17 9 8	21 10 11	15 6 9	1
68	Males Females	256 137 119	19 9 10	11 7 4	21 9 12	24 13 11	25 14 11	16 10 6	16 10 6	18 9 9	28 16 12	28 14 14	25 12 13	25 14 11	
69	Males Females	120	13 8 5	22 14 8	15 13 2	15 6 9	17 10 7	18 10 8	16 12 4	17 7 10	19 14 5	16 8 8	11 7 4	20 11 9	
70	Total Males Females	144	18 10 8	16 12 4	27 15 12	23 11 12	21 11 10	21 13 8	22 9 13	23 16 7	24 9 15	27 13 14	18 11 7	19 13 6	1
71	Males Females	112	12 8 4	15 10 5	17 10 7	17 8 9	16 10 6	10 5 5	13 5 8	18 10 8	18 11 7	19 13 6	26 12 14	18 10 8	
72	Males Females	273 146 127	20 7 13	20 14 6	21 9 12	21 14 7	23 13 10	21 9 12	28 17 11	22 13 9	23 17 6	24 11 13	18 8 10	31 13 18	3

Table 57.—CONTINUED.—Deaths by ages, sex and months.

							М	lonths	, 1896.						
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April.	May,	June.	July.	August.	September.	October.	November.	December.	Inhnoun
73	Total Males Females	232 148 84	14 9 5	17 9 8	19 7 12	20 13 7	15 9 6	16 13 3	20 14 6	20 16 4	28 18 10	23 13 10	14 9 5	26	3 _
74	Males Females	274 158 116	16 9 7	19 13 6	22 12 10	27 16 11	17 12 5	18 10 8	26 16 10	16 11 5	29 15 14	26 14 12	34 17 17	29 12 11	2
75	Males Females	245 159 86	11 9 2	26 13 13	25 14 11	21 14 7	16 9 7	20 13 7	17 14 3	18 14 4	17 10 7	21 16 5	23 13 10	29 19 10)
76	Males Females	276 166 110	16 11 5	19 12 7	26 17 9	27 16 11	18 7 11	24 15 9	21 10 11	30 20 10	24 13 11	16 11 5	29 17 12	26 17 9	7
77	Males Females	201 113 88	13 7 6	20 9 11	16 9 7	16 7 9	13 5 8	17 8 9	15 8 7	20 15 5	16 13 3	19 9 - 10	13 5 8	23 18 5	3
78	Males Females	211 118 93	19 10 9	16 7 9	23 9 14	20 9 11	14 11 3	18 14 4	14 4 10	17 12 5	10 7 3	22 15 7	23 12 11	15	
79	Total Males Females	169 97 72	17 10 7	17 7 10	19 9 10	17 10 7	8 6 2	7 5 2	12 8 4	10 8 2	9 6 3	15 7 8	20 11 9	17 10 7) _
80	Males Females	193 104 .89	17 11 6	17 8 9	11 6 5	13 5 8	8 2 6	18 12 6	9 3 6	13 7 6	18 10 8	20 12 8	31 18 13	18 10 8)
81	Males Females	144 90 54	8 6 2	9 7 2	8 5 3	14 9 5	14 7 7	15 7 8	8 6 2	17 11 6	13 9 4	8 4 4	13 12 1	17	-
82	Males Females	158 98 60	11 8 3	12 6 6	15 10 5	19 9 10	11 9 2	19 9 10	10 9 1	11 10 1	13 8 5	15 11 4	14 6 8	885	3
83	Males Females	126 71 55	10 6 4	13 8 5	9 8 1	15 8 7	11 8 3	14 6 8	2 1 1	9 4 5	10 4 6	10 5 5	13 9 4	10 4 6	1
84	Males Females	160 81 79	11 7 4	17 13 4	14 6 8	11 3 8	10 7 3	12 7 5	12 3 9	7 6 1	17 6 11	18 12 6	12 5 7	18 6 12	3 .
85	Total Males Females	111 64 47	7 3 4	7 3 4	14 11 3	12 5 7	13 8 5	11 6 5	8 5 3	10 6 4	5 4 1	7 5 2	6 1 5	11 7 4	
86	Males Females	93 56 37	9 6 3	3 1 2	12 4 8	8 4 4	6 3 3	8 6 2	7 4 3	4 2 2	8	10 8 2	10 7 3	8 3 5	3
87	Males Females	94 54 40	9 4 5	4 2 2	14 8 6	5 2 3	4 4	6 5 1	4 2 2	6 4 2	10 2 8	15 10 5	12 8 4	532	3
88	Total Males Females	61 44 17	2 2	4	12 8 4	4 2 2	3 3	3 3	2 2	5 3 2	4 2 2	8 7 1	5 3 2	. 9	
89	Maies Females	50 31 19	i	2 1 1	10 8 2	2	3 2 1	2 2 1	3 1 2	i	5 3 2	9 5 4	7 6 1	3	ı.
99	(Total Males Femules	39 19 20	3 2 1	2 1 1	5	3	4 3 1	2 2	2	5 5		3	5 3 2	3 1	1

Table 57.—CONCLUDED.—Deaths by ages, sex and months.

							N	Ionths	, 1896.						
Ages in years.	Sex.	Year, 1896.	January.	February.	March.	April.	May.	June,	July.	August.	September.	October.	November.	December.	Unknown.
91	Males Females	37 22 15	2 2	4 2 2	6 1 5	3	1 1	3 3	2 1 1	1	i	1	3 1 2	7 6	3
92	Males Females	33 16 17	6 3 3	1 i	4 2 2	1	1	3 2 1	1 i	4 2 2	3 1 2		7 4 3	1	
93:	Males Females	19 10 9	3 3	i	2 1 1	2 2	1	2		2 2	1		22	2 1	
94	Total Males Females	11 4 7		2 1 1	i	1	1		2	1	2		=		-
95	Males Females	11 8 3	2 1 1	3 1 2				1		2 2			3		
96	Males Females	10 9 1					2 2	1	1		4 3 1		==	1	
97	Males Females	7 3 4		1		1	1				1 1		3		
98	Total Males Females	9 2 7						1	1 i	1	1 1	2 2	3		
99	Males Females	2 1 1			:::::		1 1			1			:::		-
100+	Males Females	9 5 4	1	1		1	:::::		1		1	1	2 1 1	1	
Unknown_	Total Males Females Unknown	260 148 107 5	13	22 11 11	23 13 9 1	. 10	21 12 9	16 8 7	24 14 10	13 7 5 1	22 14 8	7	18 7 11	29 17 6	121

COLOR OF DECEDENTS, BY COUNTIES, 1896.

Table 58 presents a detailed statement, by sex and by counties, of the deaths that occurred in 1896 of each color and race. Of the total number of decedents, 21,983, not less than 21,696, or 98.69 per cent, were white; 129, or .59 per cent, black; 42, or .19 per cent, mulatto; and 113, or .51 per cent, Indian. There were only 3 deaths, or .01 per cent of the total number in which the color was unspecified. As with births and marriages, the number and ratio of colored deaths is so small, and fluctuates so widely in different years from accidental causes, that minute comparison of the death rates of the different colors and races for any single year is not advisable.

Table 58.—Exhibiting, by sex, for the State and counties, the color of decedents, as returned for the year 1896. (Stillbirths included.)

	Al	l color	s, 1896			White		I	E	Black	τ.	M	alati	o.	Ind	lia	n.	Unk	n'n.
State and counties.	Total	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Total	Males.	Females.	Total.	Males.	Females.	Total.	Males.
State	21,983	11,807	10,119	57	21,696	11,648	9,991	57	129	77	52	42	22	20	113	57	56	3	3
AlconaAlgerAlleganAlpenaAhrim	33 28 378 156 91	16 20 196 87 39	17 8 180 69 52		31 28 374 156 88	15 20 194 87 39	16 8 178 69 49	2	i	 					3	1	1.0	=	
Arenac	50 40 183 535 78	27 20 103 298 33	23 20 80 236 45	i	48 25 182 527 78	26 12 102 294 33	22 13 80 232 45		1 2	1 2		····		i	15 5	8	7		
Berrien Branch Calhoun Cass Charlevoix	387 248 411 185 72	202 117 236 92 41	179 131 170 93 31	5	385 246 405 165 71	200 116 234 83 40	179 130 166 82 31	5	1 2 3 5	2		12	6	****	3 3 1	1	3 2		
Cheboygan Chippewa Clare Clinton Crawford	118 200 45 232 22	110 21	53 90 24 107 13		116 189 45 232 21	64 103 21 123 8	52 86 24 107 13		i	1					10	6	4		
Delta Dickinson Eaton Emmet Genesee	187 197 246 116 489	70	77 90 134 46 238		187 197 246 108 485	68	77 90 134 40 237		1 4		i				7	2			
Gladwin Gogebic	21 214 139 185 285	71 85	10 74 68 100 124		21 214 139 183 285	71 84	10 74 68 99 124						i			::			
Houghton Huron Ingham Ionia Iosco	476 259 380 307 98	149 196 146	161	3	474 259 375 307 96	149 194 146	206 110 178 161 37	3	5		3								
Iron Isabella Jackson Kalamazoo Kalkaska	496 414	259 222	75 237		64 147 490 412 33	78 255 220	25 69 235 192 15		1 5 2 1	9		1	····		8			7.55	:::
Kent Keweenaw Lake Lapeer Leelanau	35	16 17 104	11 18 101		1,177 27 35 205 76	16 17 104	536 11 18 101 35		2	1	1	2	1	1	14	1:	1:		
Lenawee Livingston Luce Mackinac Macomb	132	70 17 41	16 25	3	417 132 33 65 317	70 17 37	187 62 16 25 151	3			3				4	4	::		77
Manistee Marquette Mason Mecosta Menominee	158 154	307 94 89	244 63 64	1	312 551 155 150 339	306 91 85	151 243 63 64 145	1 1	2	2		2	2		8	1124	1		=

Table 58. —Concluded.—Deaths by counties, sex and color.	Table	58.—CONCLUDED.	-Deaths	by	counties,	sex	and	color.
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	A11	colors	s, 1896		1.0	White		d	E	Black	.	Mu	latt	0.	Ind	liai	a.	Unk	n'n
Counties.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Total	Males.	Females.	Total	Males.	Females.	Total.	Males.
Midland Missaukee Monroe Montealm Montmorency	108 46 333 292 31	65 25 185 130 18	43 21 167 161 13	1 1	108 42 329 291 31	65 23 164 129 18	43 19 164 161 13		3 1	1 1	2	i		i	4	2	2 : : :		
Muskegon Newaygo Oakland Oceana Ogemaw	361 111 370 135 18	184 59 195 78 13	171 52 175 57 5	6	361 111 361 132 18	184 59 190 76 13	171 52 171 56 5	6	9	5	4				2		1		
Ontonagon Osceola Oscoda Otsego Ottawa	56 118 17 39 321	34 66 11 20 185	52 52 6 19 136		53 118 17 39 320	33 66 11 20 184	20 52 6 19 136	2 1 2 1 2	i	i					3	1	2	11111	
Presque Isle Roscommon Saginaw Sanilac Schoolcraft	36 8 957 259 50	20 5 496 152 29	16 3 457 107 21	Caral	36 8 952 259 50	20 5 494 152 29	16 3 454 107 21	4							5	2	3		
Shlawassee St. Clair St. Joseph Tuscola	224 441 250 257	114 233 138 112	108 207 111 145	2 1 1	224 440 249 254	114 232 138 110	108 207 110 144	1	1	``i	i	 i	 1			1	 1		
Van Buren Washtenaw Wayne Wexford	307 421 4,014 117	167 236 2,191 62	139 184 1,822 54	1	303 399 3,949 117	166 225 2,149 62	136 173 1,799 54	1		2	2 5 19	15 3		6 3			1		-

NATIVITY AND NATIONALITY OF DECEDENTS, BY COUNTIES, 1896.

In Table 59 the general nativity of decedents of each sex, classed as native born and foreign born, may be seen for the year 1896, and in Table 60 the nationalities of the foreign born decedents are separately specified. The data in these tables may be compared with the corresponding population of each general nativity and nationality as given by the State census of 1894. The value of the data relative to nativity and nationality of decedents would be much enhanced if the law provided for a statement of the birthplaces of the parents of each person whose death is reported. As it is, we cannot distinguish the differences in mortality, if any, characteristic of the children of foreign parents of various nationalities, and contrast them with the death rates of the children of natives. The new law, in force since August 29, 1897, remedies this omission, and the statistics of nativity of decedents compiled thereunder will be more valuable than formerly.

Table 59.—Exhibiting, by sex, for the State and counties, the nativity of decedents returned for the year 1896. (Stillbirths included.)

	All	nativiti	es, 1896.	49	N	ative	born.		F	reign	born.		τ	nkn	own	le.
State and counties.	Total.	Males.	Females.	Unknown.	Total	Males.	Females.	Unknown.	Total	Males.	Females.	Unknown.	Total.	Males.	Females.	Thenown.
State	21,983	11,807	10,119	57	16,074	8,430	7,590	54	5,111	2,869	2,241	1	798	508	288	1
AlconaAlgerAlleganAlpenaAntrim	33 28 378 156 91	16 20 196 87 39	17 8 180 69 52	2	25 19 295 96 68	10 11 151 55 27	15 8 142 41 41	2	8 9 67 58 20	6 2 35 30 10	32 28 10	11111	7 16 2 3	7 10 2 2	6	
Arenac Baraga Barry Bay Benzie	50 40 183 535 78	27 20 103 298 33	23 20 80 236 45	1	30 31 152 380 65	17 16 88 212 25	13 15 64 167 40	1	19 9 28 146 13	9 4 14 83 8	10 5 14 63 5		3 9	1 3	2 6	
Berrien Branch Calhoun Cass Charlevoix	387 248 411 185 72	202 117 236 92 41	179 131 170 93 31	5	278 225 340 162 50	137 106 198 79 23	135 119 138 83 27	6	71 15 58 18 22	41 7 29 9 18	30 8 29 9 4	11111	38 8 13 5	24 4 9 4	14 4 3 1	
Cheboygan Chippewa Clare Clinton Crawford	118 200 45 232 22	65 110 21 123 9	53 90 24 107 13	2	79 132 39 186 17	40 70 19 99 7	39 62 20 85 10	2	38 59 6 41 5	24 34 2 22 22 2	14 25 4 19 3	1111	1 9 5	6 2	3	11111
Delta Dickinson Eaton Emmet Genesee	187 197 246 116 489	110 107 112 70 251	77 90 134 46 238		136 145 219 86 377	76 80 97 49 187	60 65 122 37 190		51 46 22 13 83	34 24 13 11 51	17 22 9 2 32	1111	6 5 17 29	3 2 10 13	3 3 7 16	11 1 1 1 1
Gladwin Gogebic G'd Traverse. Gratiot Hillsdale	21 214 139 185 285	11 140 71 85 160	10 74 68 100 124	: : 1	18 142 97 170 247	8 85 52 77 133	10 57 45 93 , 113	1	3 67 36 14 26	3 52 14 7 21	15 22 7 5	11211	5 6 1 12	3 5 1 6	2 1	
Houghton Huron Ingham Ionia Iosco	476 259 380 307 98	269 149 196 146 60	207 110 181 161 38	3	343 161 316 245 64	203 95 161 113 41	140 66 152 132 23	3	131 97 43 42 33	65 53 23 25 19	66 44 20 17 14	11111	2 1 21 20 1	1 12 12 8	1 9 12 1	
Iron	64 156 496 414 34	39 81 259 222 17	25 75 237 192 16		38 132 381 311 22	17 69 194 159 11	21 63 187 152 10	1	21 21 67 71 5	17 10 36 42 3	4 11 31 29 2		5 3 48 32 7	5 29 29 21 3	1 19 11 4	
Kent Keweenaw Lake Lapeer Leelanau	1,181 27 35 205 90	638 16 17 104 48	538 11 18 101 42	5	847 19 30 141 66	436 12 14 70 31	406 7 16 71 35	5	255 8 5 61 24	139 4 3 32 17	116 4 2 29 7	1111	79	63	16	1.4.4.4.4
Lenawee Livingston Luce Mackinac Macomb	422 132 33 69 317	231 70 17 41 166	190 62 16 25 151	3	342 101 19 53 231	184 48 9 33 119	157 53 10 17 112	3	69 29 13 14 84	38 20 7 8 45	31 9 6 6 6 39		11 2 1 2 2	9 2 1	2	4 7 7 7 1
Manistee Marquette Mason Mecosta Menominee	312 553 158 154 343	161 307 94 89 195	151 244 63 64 145	2 1 1 3	236 374 117 120 240	121 199 66 70 132	115 173 50 49 105	2 1 1 3	76 165 39 28 90	40 96 27 14 54	36 69 12 14 36	1 1 2 2 2 2	14 2 6 13	12 1 5 9	2 1 1 4	0.000.00

Table 59.—CONCLUDED.—Deaths by counties, sex and nativity.

	All	nativiti	es, 1896		N	ative	born.		Fo	reign	born.		τ	Inkn	own	1.
Counties.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Unknown.	Total.	Males.	Females.	Taknown.
Midland Missaukee Monroe Montealm Montmorency	108 46 333 292 31	65 25 165 130 18	43 21 167 161 13	 1 1	87 34 250 232 24	50 18 115 108 14	37 16 134 123 10	1 1 1	19 11 78 46 3	13 6 45 17 1	6 5 33 29 2		2 1 5 14 4	2 1 5 5 3	9 1	
Muskegon Newaygo Oakland Oceana Ogemaw	361 111 370 135 18	184 59 195 78 13	171 52 175 57 5	6	260 88 284 107 11	135 45 141 60 7	119 43 143 47 4	6	91 23 73 20 6	45 14 42 12 5	46 9 31 8 1	17 17 17	10 13 8 1	12 6 1	6 1 2	
Ontonagon Osceola Oscoda Otsego Ottawa	56 118 17 39 321	34 66 11 20 185	22 52 6 19 136		37 84 12 28 205	20 52 7 16 123	17 32 5 12 82		16 32 4 11 114	12 13 3 4 61	19 1 7 53	2222	3 2 1	2 1 1	1	
Presque Isle Roscommon Saginaw Sanilac Schoolcraft	36 8 957 259 50	20 5 496 • 152 29	16 3 457 107 21	4	25 6 619 145 36	15 4 305 83 19	10 2 310 62 17	4	11 317 113 13	5 1 183 69 9	134 44 4		21 21 1	8	1 13 1	
Shia wassee St. Clair St. Joseph Tuscola	224 441 250 257	114 233 138 112	108 207 111 145	2 1 1	176 265 196 182	89 129 103 83	85 135 92 99	2 1 1	43 167 40 68	23 97 24 24	20 70 16 44	:::::::::::::::::::::::::::::::::::::::	5 9 14 7	2 7 11 5	3232	
Van Buren Washtenaw Wayne Wexford	307 421 4,014 117	167 236 2,191 62	139 184 1,822 54	1 1 1 1	267 269 2,798 92	139 153 1,505 51	127 116 1,293 40	1	31 89 1,096 20	22 50 603 10	9 39 492 10	i	9 63 120 5	6 33 83 1	3 29 37 4	1.

Table 60.—Exhibiting, for the State and counties, the nationalities of foreign born decedents in Michigan during the year 1896.

State and counties.	Sex.	Total foreign born dece- dents, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Holland.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All oth- ers.*
State	Total Males Females Unknown	5,111 2,869 2,241 1	1,286 659 626 1	824 491 333	666 370 296	1,357 774 583	219 115 104	292 179 113	75 51 24	84 39 45	308 191 117
Alcona	Total Males Females	8 6 2	4 2 2	2 2	1 1			1 1			
Alger	Total Males Females	2 2	1								1
Allegan	Total Males Females	67 35 32	7 5 2	11 4 7	6 4 2	15 5 10	16 8 8	1 1			11 8 8
Alpena	Total Males Females	58 30 28	28 10 18	5 3 2	8 6 2	11 7 4		. 5 . 1			
Antrim	Total Males Females	20 10 10	.8 3 5	6 2 4		2 2		3 2 1			1
Arenac	Total Males Females	19 9 10	18 8 10			1					
Baraga	Total Males Females	9 4 5	3 1 2	1 1	1			4 1 3			
Barry	Total Males Females	28 14 14	7 3 4	10 6 4	3 3	6 1 5	1				1 i
Вау	Total Males Females	146 83 63	63 29 34	16 10 6	17 10 7	28 21 7		9 7 2		7 3 4	8
Benzie	Total Males Females	13 8 5	4 2 2	1	3 1 2	2 1 1		2 2	1 1		
Berrien	Total Males Females	71 41 30	5 4 1	10 5 5	8 3 5	44 27 17		2 1 1	1	1 1	
Branch	Total Males Females	15 7 8		6 4 2	5 5	3 2 1					1
Calhoun	Males Females	58 29 29	6 3 3	20 11 9	10 5 5	18 8 10					2 2 2
Cass	Total Males Females	18 9 9	2 2	2	3 1 2	8 6 2		2 1 1			1 1
Charlevoix	Total Males Females	22 18 4	7 5 2	1 1	9 8 1	3 3					2 2
Cheboygan	Total Males Females	38 24 14	19 12 7	7 4 3	4 3 1	5 2 3		3 3			

^{*} Includes Belgium, Switzerland, Hungary, Bohemia, France and Italy in addition to the countries included under this title in last Report.

Table 60.-Continued.-Nationalities of foreign born decedents in Michigan, 1896.

Counties.	Sex.	Total foreign born dece- dents, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All oth- ers.
Chippewa	Total Males Females	59 34 25	37 18 19	10 8 2	7 4 3	2 2		2 2			1
Clare	Total Males Females	6 2 4	4 2 2	1 1		1 1					
Clinton	Total Males Females	41 22 19	6 4 2	7 3 4	6 3 3	21 11 10	1				
Crawford	Total Males Females	5 2 3	4 2 2		1						
Delta	Total Males Females	51 34 17	15 9 6	3 2 1	7 3 4	6 4 2		16 13 3	4 3 1		
Dickinson	Total Males Females	46 24 22	8 3 5	7 4 3	1	3 2 1	1	16 6 10	3 2 1	1 1	6 5 1
Eaton	Total Males Females	22 13 9	1 1	5 3 2	9 5 4	7 4 3					
Emmet	Total Males Females	13 11 2	3 2 1	4 3 1	3 3 	2 2			1 1		
Genesee	Total Males Females	83 51 32	28 12 16	25 17 8	19 14 5	8 6 2					3 2 1
Gladwin	Total Males Females	3 3	2 2			1				<i>'</i>	
Gogebic	Total Males Females	67 52 15	5 3 2	16 12 4	3 1	13 10 3		10 8 2	15 12 3	3 3	1 1
G'd Traverse	Total Males Females	36 14 22	8 3 5	6 3 3	2 1 1	9 5 4	1 1	8 2 6	<u>1</u>		1
Gratiot	Total Males Females	14 7 7	3 2 1	3	3 2 1	4 2 2					1
Hillsdale	Total Males Females	26 21 5		16 12 4	7	3 2 1					
Houghton	Total Males Females	131 65 66	22 13 9	42 19 23	14 4 10	22 13 9		12 7 5	14 7 7	1 1	2
Huron	Total Males Females	97 53 44	44 20 24	17 12 5	5 3 2	24 13 11				6 4 2	1 1
Ingham	Total Males Females	43 23 20	8 3 5	8 5 3	10 5 5	17 10 7					
Ionia	Total Males Females	42 25 . 17	11 6 5	10 7 3	7 3 4	12 7 5		1 1			1

Table 60.—Continued.—Nationalities of foreign born decedents in Michigan, 1896.

Countles.	Sex.	Total foreign born dece- dents, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All oth- ers.
Iosco	Total Males Females	33 19 14	17 8 9	5 4 1	2 1 1	5 4 1		3 2 1	1		
Iron	Total Males Females	21 17 • 4	5 3 2	4 2 2		1 1		7 7	1 1	2 2	1 1
Isabella	Total Males Females	21 10 11	11 5 6	5 3 2	2 1 1	3 1 2					
Jackson	Total Males Females	67 36 31	11 5 6	20 13 7	12 5 7	21 11 10					2 1
Kalamazoo	Total Males Females	71 42 29	10 8 2	10 5 5	14 6 8	11 7 4	22 13 9	1 1	2 1 1		1
Kalkaska	Total Males Females	5 3 2	3 1 2	2 2							
Kent	Total Males Females	255 139 116	36 19 17	28 12 16	36 24 12	43 22 21	53 31 22	8 3 5	3 1 2	7 3 4	41 24 17
Keweenaw	Total Males Females	. 8 4 4	1 1	4 2 2	1 1	1 1			1 1		
Lake	Total Males Females	5 3 2	3 2 1			2 1 1					
Lapeer	Total Males Females	61 32 29	32 15 17	12 7 5	6 4 2	8 3 5					s
Leelanau	Total Males Females	24 17 7	5 3 2	2 2	2 1 1	9 8 1		5 2 3			1
Lenawee	Total Males Females	69 38 31	6 4 2	14 9 5	21 11 10	25 11 14		1 1			2
Livingston	Total Males Females	29 20 9	5 3 2	. 10 6 4	8 7 1	6 4 2					
Luce	Total Males Females	13 7 6	5 1 4	3 2 1	1	1		2 2	1		
Mackinac	Total Males Females	14 8 6	7 3 4	1 1	5 3 2			1			
Macomb	Total Males Females	84 45 39	15 9 6	9 4 5	3	56 31 25					
Manistee	Total Males Females	76 40 36	12 8 4	4	. 4 1 3	20 11 9		27 16 11		9 4 5	
Marquette	Total Maies Females	165 96 69	23 11 12	39 23 16	20 7 13	16 11 5		49 29 20	14 13 1		

Table 60.—Continued.—Nationalities of foreign born decedents in Michigan, 1896.

	,										
Counties.	Sex.	Total foreign born dece- dents, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Russia (Fin- land).	Po- land.	All others.
Mason	Total Males Females	39 27 12	12 8 4	4 4	2 2	15 12 3		4 1 3		1	1 i
Mecosta	Total Males Females	28 14 14	10 7 3	3	3 2 1	7 2 5	1	4 2 2			
Menominee	Total Males Females	90 54 36	22 16 6			5 2 3		16 10 6	1		46 25 21
Midland	Total Males Females	19 13 6	8 6 2	4	5 3 2	2 2					
Missaukee	Total Males Females	11 6 5	1 1		1 1	1	8 5 3				
Monroe	Total Males Females	78 45 33	8 4 4	10 6 4	5 5	49 27 22					6 3 3
Montcalm	Total Males Females	46 17 29	14 3 11	7 6 1	7 1 6	5 1 4		11 5 6			2 1 1
Montmorency.	Total Males Females	3 1 2	2			1 1					
Muskegon	Total Males Females	91 45 46	15 5 10	8 3 5	6 1 5	13 8 5	27 14 13	21 13 8			1 1
Newaygo	Total Males Females	23 14 9	6 3 3	5 3 2	4 3 1	2 1 1	2 2	4 2 2			
Oakland	Total Males Females	73 42 31	14 9 5	23 11 12	14 8 6	20 12 8					2 2
Oceana	Total Males Females	20 12 8	3 1 2	2 2	3 2 1	6 3 3		5 3 2			1 1
Ogemaw	Total Males Females	6 5 1	3 3	1 1	1 1	1 1					
Ontonagon	Total Males Females	16 12 4	4 3 1		4	3 2 1		3 2 1	1 1	1 1	
Osceola	Total Males Females	32 13 19	17 6 11	3 1 2	3 1 2	7 3 4		2 2			
Oscoda	Total Males Females	4 3 1	3 3			· 1					
Otsego	Total Males Females	11 4 7	5 1 4		2 1 1	3 2 1		1 1			
Ottawa	Total Males Females	114 61 58	5 1 4	7 6 1	9 8 1	14 9 5	77 85 42	1 1		1 1,	

Table 60.—CONCLUDED.—Nationalities of foreign born decedents in Michigan, 1896.

Counties.	Sex.	Total foreign born dece- dents, 1896.	Can- ada.	Great Brit- ain.	Ire- land.	Ger- many (Aus- tria).	Hol- land.	Nor- way, Swe- den and Den- mark.	Rússia (Fin- land).	Po- land.	All oth- ers.
Presque Isle	Total Males Females	11 5 6			1 1	7 2 5				2 1 1	1 1
Roscommon	Total Males Females	1 1		1 1							
Saginaw	Total Males Females	317 183 134	90 44 46	35 21 14	27 20 7	142 81 61		5 5	2 1 1	11 7 4	5 4 1
Sanilac	Total Males Females	113 69 44	69 42 27	12 9 3	18 10 8	11 6 5					3 2 1
Schoolcraft	Total Males Females	13 9 4	7 7		2 2			3 1 2	1 1		
Shiawassee	Total Males Females	43 23 20	12 7 5	11 7 4	7 4 3	11 4 7					2 1 1
St. Clair	Total Males Females	167 97 70	65 33 32	27 19 8	30 15 15	39 26 13					6 4 2
St. Joseph	Total Males Females	40 24 16	1 1	· 6	7 4 3	16 9 7	1 1				9 7 2
Tuscola	Total Males Females	68 24 44	39 · 13 26	14 7 7	2 1 1	13 3 10					
Van Buren	Total Males Females	31 22 9	7 6 1	11 7 4	5 3 2	6 4 2					2 2
Washtenaw	Total Males Females	89 50 39	8 2 6	23 16 7	16 6 10	41 26 15		1 1			
Wayne	Total Males Females Unknown	1,096 603 492 1	231 123 107 1	152 91 61	161 85 76	386 217 169	8 3 5	2 2	7 3 4	31 11 20	116 68 48
Wexford	Total Males Females	20 10 10	7 1 6	5 3 2	1 1	1 1		6 4 2			

TOWNSHIPS REPORTING NO DEATHS AND DELINQUENT TOWNSHIPS, 1896.

There were 66 townships and wards, having an aggregate population of 18,308 persons in 1894, in which no deaths occurred in 1896, according to the statements of their supervisors. The supervisors of 11 townships, representing a total population of 7,501 persons in 1894, failed entirely to make reports of deaths, as required by law.

Considerable improvement seems to have taken place in the matter of delinquent returns as compared with the previous year. The largest township failing to make a report, owing to the neglect of this law on the part of the supervisor, is Clay township in St. Clair county. Such disregard of the law is wholly inexcusable in an old and populous county.

Table 61.—List of townships in which it was reported that no deaths occurred in 1896, showing population in 1×94.

Alcona	County.	Township.	Population, June 1, 1894.	County.	Township.	Population, June 1, 1894.
Mitchell	Alcona			Luce	Columbus	57
Alger	MICONG	Mitchell		Mackinac	Portage	158 254
Antrim	Alger	Onota	138	Marquette	•	143
Baraga	Antrim					328
Cheboygan Ellis	Baraga	Covington	88	Missaukee	Caldwell	280 585
Chippewa	Benzie	Lake	- 171	Montmorency	Wheatfield	130
Clare	Cheboygan	Ellis	163	Muskegon	Blue Lake	148
Clare	Chippewa	Sugar Island	570		BeaverGoodwell	439 392
Crawford	Clare	₹ Franklin	178	Newaygo	Monroe	733 277
Emmet	a	,			(Cumming	373
Carp Lake 363 886 Springvale * West Traverse * Ontonagon Springvale * Carp Lake Springvale * Carp Lake Springvale * Carp Lake Springvale * Carp Lake Springvale Springvale * Carp Lake Springvale Spring	Crawiora			Ogemaw	{ Mills	172 81 623
Springvale	Fmmat	Carp Lake	363			629
Buckeye	Billine U	Springvale	*	Ontonagon		172 53
Bourett				Osceola	Middle Branch	282
City of Gladwin, 3d w'd 144 Presque Isle Moltke 44 4th " 182	Gladwin	Bourett	*	Otsego	Chester	212
G'd Traverse		City of Gladwin, 3d w'd	144	Presque Isle.	Moltke	463
Au Sable City, 2d ward 800	G'd Traverse	Union	193	Posiommon	Gerrish	65 64
Cherry Valley 210 Eden 222 Elk Lake Elk Lake 89	Iosco	Au Sable City, 2d ward	800	10scommon.	Markey Richfield	39 79
Corange	K allraalra			Schoolcraft .	Harrison	558
Lake Eden 222	Maikaska			St. Clair	Berlin	1,193
Lake 89 ·	Lake	Eden	222	Wexford		347 157
		Lake	89			
Total population reporting no deaths 18.3	Total nonu	lation reporting no death	i	<u> </u>	<u> </u>	18.308

^{*} Townships organized since census was taken.

Table 62.—List of townships from which no returns of deaths were received for 1896, showing population in 1894. (List closed December 1, 1897.)

County.	Township.	Popula- tion, June 1, 1894.	County.	Township.	Popula- tion, June 1, 1894.
Alcona	Alcona	985	Chippewa	Superior*	1,596 89
Alpena	Sanborn	346	Gladwin	Butman Clement	205 91
Bay	Garfield	302	Houghton	Duncan	969 231
Charlevoix	Boyne Valley	735	St. Clair	Clay	1,952
Total population	on of delinquent to	wnships			7,501

^{*} No statement from county clerk.

SECTION II.—CAUSES OF DEATHS IN MICHIGAN DURING THE YEAR 1896.

The tables in this section of the Report are designed to exhibit the particulars in regard to the mortality in Michigan for the year 1896 with especial reference to the individual causes of death, so far as the returns afford information on this point. It is well ascertained that not all the deaths that annually occur in Michigan are enumerated by the supervisors. It has been estimated that should the number of deaths actually returned be increased by 60 per cent of itself, the result would probably not exceed the number of deaths that occur. This percentage of omissions is known to be somewhat irregularly distributed through the year, the early months most distant from the date of enumeration being the most deficient. It is evident that the individual causes of death share in this deficiency of enumeration, and, on the average, each should be increased by about the same percentage as total deaths in order to give the entire number of deaths. Certain diseases, as cholera infantum, whose incidence is mostly in the later months of the year, are more fully returned than others, like measles or scarlet fever, which occur chiefly in the spring.

The original statements of the causes of death are made by the supervisors or assessors on the authority of the families or friends of the deceased persons, and are not based, as a rule, upon the death certificates of the medical attendants. A very large percentage of deaths is returned with the cause of death entirely unspecified or stated to be "unknown," while many of the specified causes included in the tables are so indefinite as to afford no accurate information in regard to the diseases that caused death. Such are the deaths returned as due to "lung trouble," "brain difficulty," "kidney complaint," "heart failure," (no less than 389 of these in 1896, few of which were probably actual heart disease), "convulsions," "dropsy" of various organs, "fever" (unspecified as to its nature), "old age," "debility," etc., etc. The best that can be done with such statements is to classify such of them as admit of it under the organ affected, and to remember that the deaths reported from definitely specified causes would be increased somewhat if the nature of the diseases included in these indefinite returns could be ascertained.

The foregoing remarks in regard to the imperfections of causes of death apply only to the returns received under the old registration law, which form the basis of this Report. It is very gratifying that the Legislature of 1897 passed a law for the immediate registration of deaths under which physicians are required to certify to the cause of death. In case no physician was in attendance upon deceased person the registrar is required to refer the certificate to the health officer or coroner for investigation prior to issuing a burial or removal permit. The records already obtained under this new registration law show that the quality of the returns of causes of death will be greatly improved in this State, so that very much more valuable information may be expected in the reports of following years.

The most important causes of death from a practical standpoint are those that the State Board of Health is endeavoring to restrict—the "communicable diseases dangerous to the public health" as defined by law. Especial prominence is given to these in

the tables in this section of the Report, and in the following summary the number and percentage to total deaths from all specified diseases are stated for the leading ones:

SUMMARY OF REGISTRATION OF CAUSES OF DEATHS, 1896.*

Deaths from all causes,	•	•		•	•	21,983
Death rate per 100,000 population	•				•	949.4

In the above statement of deaths from all causes, stillbirths are included to the number of 1,254. Excluding these, as is customary in most mortality reports, we have:

Excluding 1,289 deaths from violence, 1,254 stillbirths, 199 premature births, and 1,820 deaths of which the causes were unknown or unspecified, we have:

Deaths from SPECIFIED DISEASES, 17,521

Even this number contains many deaths the causes of which are practically unspecified, as "old age," "debility," etc., but such deaths can be certainly ascribed to disease. The total thus obtained makes a more satisfactory basis of reference for stating the proportion of deaths from any specified cause than the grand total inclusive of deaths from violence, stillbirths, and "unknown" causes. Thus we have:

Deaths from Communicable Diseases Dangerous to the Public Health, 4,258 or 24.8 per cent.

This number includes only those at present so defined by the State Board of Health. It will probably in time include all specific infectious diseases. The principal diseases now included are:

Consumption,			•		•	•		•	•	2,098 or 1	11.9 per cent.
Diphtheria and c	roup	,		•						911 or	5.2 per cent.
Typhoid fever,	•				•			•		539 or	3.1 per cent.
Scarlet fever,		•								106 or	.6 per cent.
Whooping cough,									•	158 or	.9 per cent.
Measles, .		•					•			121 or	.7 per cent.
Smallpox										13 or	.1 per cent.

Certain other diseases and groups of diseases of special importance are:

Cancer, .				•	•		•	•			•		780 or 4.4 per cent.
T 41					•								248 or 1.4 per cent.
Pneumonia,		• .					•				•		1,386 or 7.9 per cent.
Lung diseases	(in	clud	ing	pn	eumo	nia	and	co	nsu	mp	tion),	3,982 or 22.7 per cent.
Bowel diseases	3,	•		•	•								1,803 or 10.3 per cent.
Brain diseases	,							•					1,876 or 10.7 per cent.
Heart diseases													1,102 or 6.3 per cent.

^{*} See summary of registration of deaths (incidence by months, sex, age, color, nativity and nationality of decedents) on page 78.

The fundamental tables relating to causes of deaths are distinguished by bold-face type in the following synopsis. A second part has been added to table 63, showing distribution of deaths by sex for each month and period of age, and the old alphabetical list which formerly contained these data has been entirely dispensed with. Following the principal tables, the usual discussion of the individual causes of death will be presented, each disease being taken up in the order in which it appears in the tabular list.

Synopsis of tables relating to causes of deaths.

Table.	Causes of deaths in Michigan, 1896.
	A.—Diseases returned as causes of death, 1896.
63.	Important diseases returned as causes of deaths in Michigan during the year 1896, by sex, months of death and periods of age: A.—Persons; B.—Males and Females,
64.	Important diseases returned as causes of deaths in Michigan during the year 1896, by counties.
65.	Important diseases returned as causes of deaths in Michigan for each of the years 1869-96, inclusive.
66.	Important diseases registered in Michigan during 1896, compared with 1894-95 and with five quinquennial periods, 1870-94; showing death rates per 100,000 population, and proportional deaths per 1,000 deaths from specified diseases.
67.	Death rates from certain important diseases for each of the years 1869-96.
6 8.	Deaths from "old age" and deaths of persons aged under 5 years and over 70 years, by geographical divisions, 1896.
69.	Certain important diseases returned as causes of deaths in 1896, by geographical divisions:— Consumption, pneumonia, influenza, diphtheria, croup, scarlet fever, typhoid fever and diarrheal diseases.
70.	Deaths and death rates per 100,000 population, by geographical divisions, from certain important diseases in Michigan, 1896.
71.	Deaths from cancer returned for the year 1896 and for the twenty-four years, 1872-95, specifying sex and organs affected. With note on deaths from "tumor," 1896.
72.	Deaths from influenza ("la grippe") by months for each of the years 1888-96.
	B.—Deaths from violence, 1896.
73.	Deaths from violence in Michigan during the year 1896, classified.
74.	Deaths from violence in Michigan in 1896, by counties.
75.	Deaths and death rates from violence in Michigan, distinguished as accidental, suicidal and homicidal, for each of the years 1870-96, inclusive; with quinquennial averages.
76.	Deaths from violence in Michigan during the year 1896, showing sex, months of death and periods of age of decedents.

Table 63A.—PERSONS.—Important diseases and groups of diseases returned as causes ages of decedents

		1895,	8	ex.					1	Mont	hs of	deat	hs, 18	896.				
Line number.	Causes of deaths, 1896.	Total deaths,	Males.	Females.	Unknown.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
1 2	TOTAL DEATHS	21,983 17,521		10,119 8,447		1	(F. 1. F.)	3.073	13.5	12.34	(Yes)	7.00	0.00		to Carl			
3	Dangerous Com-) municable Dis- }	4,258	1,988	2,270		292	296	318	877	821	294	291	342	393	440	444	445	5
4	(Consumption	2,093	941	1,152		144	147	175	222	191	181	166	176	166	164	171	183	4
5	Other tubercular	191	89	102		17	14	19	16	14	17	17	15	17	14	16	15	
6	Marasmus	76	40	36		5	9	10	9	5	8	4	5	4	- 6	8	3	
7	Meningitis, Tub.	32	11	21		1		3		5	3	5	4	2	3	2	4	
8	Scrofula	16	7	9	4	3	1		1		2	2	2	1	2	2		
9	Tabes mesent'ica	46	23	23		7	3	2	3	2	3	4	4	7	2	2	7	
10	Other forms of }	21	8	13		1	1	4	3	2	1	2		3	1	2	1	
11	(Croup	211	116	95		26	12	10	11	8	6	11	11	14	33	37	32	
12	Croup, Membran's	51	28	23		5	2	5	2	3	1	1	2	7	4	7	12	
13	Diphtheria	649	305	344		46	38	27	38	23	18	27	33	67	97	113	122	
14	Erysipelas	62	31	31		6	7	6	7	3	6	1	1	7	3	8	7	
15	Fever, Puerperal.	46		46		4	6	6	6	0	1	3	2	3	1	6	2	
16	Fever, Scarlet	106	50	56		7	12	6	12	14	7	6	7	7	6	12	10	
17	Fever, Typhoid	539	284	255		22	36	33	37	35	26	28	55	85	94	51	36	,
18	Fever, Typho-mal.	14	6	8		2	1	1		1		3	2	1		3		
19	Fever, Typhus	2	1	1											1	1		
20	Glanders																	1
21	Measles	121	58	63		4	2	13	19	9	12	15	12	2	11	10	12	
22	-German(Rötheln)	1		1						1								
23	Smallpox	13	11	2		2	8	2	1									
24	Chickenpox	1		1					1			*****						
25	Whooping cough	158	68	90		7	11	15	5	10	19	13	26	17	12	9	14	
26	Bladder diseases	83	78	5		4	8	3	10	6	8	6	10	7	9	7	5	1
27 28 29	Calculus Cystitis	21 41 21	20 38 20	3		1 3	3		1 8 1		6			4	3 2 4	2 5		
30	Bowel diseases	1,803	1,008	794	1	49	74	82	95	95	149	268	414	280	135	90	78	1
31 32	Bowel, Inflam't'n of Diarrhea	1	185	159		24		19	24 5				48 65		29 14	27		
33 34		651 76				8	16	13	22						39 7	19		
35 36	Peritonitis Bowel disease, etc.	107 413				12		12 31	11 32	27			12 47		10 36	28		

of deaths in Michigan during the year 1896, showing sex, months of deaths and periods of trom each cause.

A	ges l	by ye	ears,					19	Ages	by	dec	eder	ts b	y fiv	е-уе	ar p	eriod	s, 189	В.				1
0.	1.	2.	3.	4.	o to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unknown.	Line number.
45,352	884	485	305	263	7,289	768	523	759	959	875	745	786	687	721	859	852	1,044	1,139	1,238	1,102	1,377	260	
2,987	794	423	269	213	4,686	666	435	630	835	727	628	685	572	617	749	753	928	1,043	1,138	1,009	1,267	153	1
484	224	178	150	112	1,148	355	212	340	455	348	271	229	146	140	118	97	89	,98	79	58	48	32	
73	34	14	6	3	130	21	63	209	323	245	208	169	118	111	97	80	76	79	65	46	30	23	1
108	8	2	3	1	122	6	4	9	12	9	2	6	2	2	2	1	4	4	2	2	1	1	1
70	2				72	1										1			1			1	
19	3	2	1	1	26			2	1		1	1								1			
8	1		1		10	1		1			dee-	1		1			1				1		1
10	1		1		12	4	1	6	7	7	1	2	1				2	2		1	:.		-
1	1				2		3		4	2		2	1	1	2		1	2	1				
67	35	:39	22	19	182	26	1	1			44.					1							-
7	8	9	5	3	32	14	3	1													1		-
45	51	64	- 81	62	303	208	72	28	10	6	5	2	3	1			2	2	2		1		4
23	3	****			26	3	1	3	4		1	4	1		1	1	1	3	4	5	4		-
								7	11	10	9	6	3										-
15	12	15	10	5	57	32	8	1	2	1	1	2				1		1					
8	3	7	10	7	35	34	54	77	82	69	42	39	19	24	18	13	5	9	6	5	4	1	4
				1	1	1	3	1	3	2	2									:	1		
								1		1													
																•							
37	33	21	7	4	102	6	3	2	2	1		1		2			1				1		
			1		1		****																-
1	1				2		***		6	4	1												-
				1	1							****											-
100	36	7	5	6	154	4						·											-
3	2		1		6	2			1	1	3	2	1		2	5	10	8	18	13	15	1	2
1 2	1	===	1		2 2 2	2	:::		i	i	2	1	1		1 1	2 2	4 5 1	1 6 1	6 3	3 5 5	10	1	1
889	197	55	13	18	1,167	65	33	43	59	44	36	32	23	22	27	34	44	46	36	36	40	16	Ţ
99 122	23 31	42 6	4		142 160		15	16 2	19	16	14	7	7	5	8 2	10	7 5	18	9	12	8	2	
500 32	109	25 4	5	3	642 44	5			i	···i			i	i		i	1 2	4	4	7	6		
133	4 24	1 7	3	1 3	9 170	3 23	8 9	9	18 20	14 12	9	13 11	.5 10	3 13	2 13	3 16	27	4 12	3	2 9	21	5	200

^{*} Includes 1,254 stillbirths.

Table 63A.—CONCLUDED.—Important diseases returned as causes of

		1896.	, Se	x.					M	onth	sof	dea	ths,	1896.				
	Causes of deaths, 1896.	Total deaths,	Males,	Females.	Unknown.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
7	Brain diseases	1,876	1,065	811		139	122	149	157	139	144	166	176	174	155	166	185	4
3	Apoplexy Brain, Congestion of	337 65	215 40	122 25	3	25 6	24 5	29 4	32 4	30 6	23 3	24	23 8	30	27 6	36 9	34	-
	Brain, Inflammation of Epilepsy	298 59	169 34	129 25		18	23	20 9	30 4	17 6	23 5	31	33 4	34 3	22 6	14 5	33 6	-
3	Meningitis Paralysis Brain disease, etc	192 745 180	101 400 106	91 345 74		20 52 14	8 44 15	20 55 12	92 55 10	13 51 16	16 56 18	19 67 15	15 77 16	16 68 20	13 71 10	11 70 21	18 77 13	
,	(Cancer	780	325	455		60	49	56	64	51	64	64	67	80	90	58	73	
3	Tumor	161	43	118		8	10	19	15	11	14	17	14	10	19	8	16	
1	Childbirth	243		243		15	21	25	19	23	18	24	13	18	23	17	27	
	Convulsions	506	287	219		34	54	40	40	45	41	36	43	49	40	40	42	l
	Diabetes	122	72	50		7	12	9	9	7	5	12	14	12	17	10	8	
	Dropsy	442	203	239		31	26	28	34	31	37	45	46	39	40	33	51	l
l	Fever (unspecified)	87	43	44		5	4	4	7	8	5	8	7	14	8	7	7	
l	Fever, Malarial	101	48	53		5	7	6	6	3	3	9	12	21	9	9	11	
	Heart diseases	1,491	882	659	1	97	108	130	127	101	100	107	126	144	145	143	158	
	Pericarditis Heart disease, etc "Heart failure"	1,025 389	39 571 222	38 454 167		11 61 25	28 78 28	10 77 43	81 38	4 70 27	2 71 27	8 71 28	7 86 33	7 100 37	6 96 43	8 107 28	123 31	
1	Influenza	248	120	128	_	13	42	50	32	16	11	6	17	7	6	24	24	l
	Kidney diseases	624	457	167		56	40	42	45	49	39	56	57	61	60	58	65	1
-	Kidneys, Inflammat'n of Kidney disease, etc	478 146	351 106	127 40		48 10	34 6	31 11	37 8	31 18	33 6	42 14	42 15	45 16	45 15	39 14	52 13	
	Liver disease, etc	203	105	98		16	14	12	17	18	15	9	13	29	25	14	20	ł
1	Lung diseases	1,889	1,068	821		139	205	268	214	139	78	86	74	90	161	184	250	1
1	AsthmaBronchitis	74 181	45 93	29 88		3 19	7 14	6 15	8 21	5 12	5 3	5 10	77	6	6 25	17	12 32	
5	PleurisyPneumonia	1,386	18 790	19 596		101	160	6 222	2 166	102	4 56	62	1 42	60 60	106	131	177	
3	Lungs, Congestion of Lung disease, etc	54 157	34 88	20 69		5 10	5 14	4 15	5 12	14 14	8	27	1 16	3 13		19	8 15	
,	Rheumatism	167	94	73	3	10	9	25	9	14	17	9	14	16	10	16	18	1
)	Septicemia	198	94	104		13	13	18	24	15	16	14	14	18	19	15	19	1
1	Spine disease, etc.	121	58	63	3	10	5	6	15	13	7	13	10	9	11	9	13	1
	Stomach diseases	299	151	148	9	22	15	22	31	30	23	97	26	31	21	22	28	1
	Stomach, Inflam'at'n of. Stomach disease, etc	97 202				13	5 10	6 16	8 23		8 15	8 19	8 18	22	6 15	6 16	19	
5	Syphilis	21	10	11	1	2	1	2	3	4	1	1	1		3	1	2	1
В	Unclassified	1,798	922	874	1 2	124	133	153	165	134	136	137	160	164	142	169	175	

deaths in Michigan, by sex, months of deaths and periods of age.

		by y	ears re.					A	ges	of d	eced	lents	by !	five-	year	per	iods	1896	3.			
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19,	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80	Unknown.
224	74	37	29	20	384	69	37	34	28	29	43	58	48	71	79	116	148	180	211	174	160	12
6 16	8		3	2	6 29	5	2	4 2	5 2	3	11 2	9	7	15 5	24 2	34 5	46	47	53 4	40	32	1
107	38	17	9	6	177	31	14	10	6	7 6	5	7	4 8	8	5 2	5	6	7 2	1 2		1	4
69	23	12	12	8	124	20	9 5	8	4 4	3 4	3 9	6 13	3	2 27	2 34	4 60	1 70		1 132	1119	116	1 4
19	3	3	3	2	30	7	1	1	3	5	7	18	8	12	10	7	12	17	18	12	11	1
6	4	1	1	3	15	2	5	6	9	14	13	46	49 13	16	79	105	104	96	75	50	33	10
					10			16	48	54	34	53	29	3	14	14	16	10	10			5
376	52	22	9	5	464	8	2	4	3	3	5	1	2	1		2	1	1	1	1	3	4
3	1		1	2	7	4	10	4	5	8	3	7	6	5	13	6	7	11	9	10	6	1
5	3	4	2	1	15	4	4	5	14	4	7	12	17	17	39	27	36	50	63	60	62	e
17	2	6	6	2	33	8	2	7	5	4	4	2	5	3		1	2	1	3	4	1	2
8	4	6	2	3	23	6	3	11	11	3	6	4	4	6	3	4	5	6	1	3	2	
72	5	3	3	6	89	20	20	24	33	42	47	47	60	86	125	109	150	203	179	138	103	16
36 35	5	1 2	2	1 4 1	3 48 38	2 14 4	2 14 4	1 17 6	27 3	35 7	26 19	35 9	44 16	55 27	10 94 21	5 78 26	110 32	8 141 54	11 117 51	11 86 41	4 75 24	9
26	7	3	3	2	41	3	3	3	5	10	6	6	3	5	11	6	10	21	30	38	45	2
10	1	2	2	1	16	10	11	16	26	21	27	27	34	30	47	41	70	62	82	52	48	4
5	i	1	2	1	97	7 3	10	15 1	19 7	17 4	23 4	20 7	27 7	27 3	34 13	34 7	54 16	47 15	63 19	37 15	31 17	4
21	1	3		1	26	3	2	3	5	7	2	9	14	12	15	28	18	27	17	11	3	1
384	163	78	29	30	684	56	45	58	58	61	58	66	62	53	92	81	116	83	121	96	91	18
- 67	2 24	13	4	9	117	4		2	::::	4	5	5	; 1	3	8	3	12 4	10 5	14 11	13 5	3	1
270	124	60	1 21	20	495	2 42	5 36	2 45	44	2 47	4 35	1 49	1 43	1 43	67	61 61	5 82	2 58	81 81	70	74	14
19 27	3 9	2 2	1 2	i	25 41	3 5	1 3	9	2 7	8	1 8	2 9	13	1	3 7	3 8	1 12	8	3 10	5 3	3 4	1
1			1		2	5	10	9	5	6	4	6	8	5	. 9	12	19	17	20	16	14	
10		1			11	3	6	12	20	18	16	17	11	11	6	10	10	17	12	7	8	3
39	12	6	3	3	63	8	6	3	5	3	1	4	1	2	1	3	4	4	2	7	4	
64	7	2	3		76	2	5	7	8	8	9	14	9	8	21	16	24	31	36	13	7	5
8 56	2 5	1	1 2		12 64	2	3 2		3 5		5 4	5 9	5 4	5 3	9 12	4 12	5 19	12 19	15 21	4 9	2 5	2
12	1				13				1	2			2	1				2				.,
330	34	16	10	9	399	32	18	23	29	29	26	34	25	33	47	38	50	69	138	217	576	15

Table 63B.—MALES AND FEMALES.—Important diseases and groups of diseases death and periods of ages of

		1896.		by	1				М	ont	hs	of de	ath, 1	896.			
Line number.	Causes of deaths, 1896.	Total deaths,	Sex.	Total deaths sex, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
1	TOTAL DEATHS*	21,983	Males Females. Unk	11, 807 10, 119 .57	750 681 3	707	949 865 5	992 921 5	865 804 3	703	812	1, 151 913 7	1, 146 911	1, 030 904 4	1,027 882 6	1, 186 993 6	28
2	SPECIFIED DISEASES	17,521	Males Females. Unk	9,071 8,447 3	585 566	667 601	745 722	748 769	621 650	643 575	715 696	892 777 1	903 763	828 760	808 729 2	897 823	21
3	Dangerous Commu- \ nicable Diseases	4,258	Males Females .	1,988 2,270								164 178	193 200	213 227	198 246	208 287	14
4	Consumption	2,093	Males Females.	941 1,152	59 85	75 72	82 93	89 133	88 106	93 88	77 89	77 99	72 94	83 81	64 107	81 102	1
5	Other tubercular diseases	170	Males Females .	81 89	5 11	10	5 10	6	6	8	6 9	9	9 5	5 8	7 7	5 9	
6	Marasmus	76	Males Females.	40 36	2 3	7 2	4 6	3 6	3 2	5 3	2 2	2 3	3	3	5 3	1 2	
7	Meningitis, Tuber.	32	Males Females.	11 21	ī		3		3 2	3	2 3	3	1	1 2	1	4	
8	Scrofula	16	Males Females.	7 9	1 2	1		1		1	1	1	1	2	2		
9	Tabes mesenterica	46	Males	23 23	2 5	2	1	2	2	2	1 3	3 1	* 4 3	1	1	4 3	
10	Other forms of tuberculosis	21	Males Females.	8	1	1	1 3	1 2	1 1	i	2		1 2		1	1	
11	Croup	211	Males	116 95		7 5	5	7	5 3	5	8 3	5 6	5 9	22 11	20 17	17 15	
12	Croup, membran'us	51	Males Females.	28 23	3 2	1	3 2	1 1	2	1	1	2	4 3	4	3	7 5	
13	Diphtheria	649	Males	305 344	21 25	17 21	10 17	19 19	9	12	9 18	18 15	33 34	41 56	58 55	58 64	
14	Erysipelas	62	Males Females.	31 31	3	4 3	1 5	6	1 2	1 5	1	<u>i</u>	5 2	2	3 5	4 3	
15	Fever, Puerperal	46	Males Females.	46	4	6	6	6	6	:	3	2	3		6	2	
16	Fever, Scarlet	106	Males Females.	50 56	4 3	5 7	2 4	6	5 9	5 2	2 4	5 2	3 4	3 3	4 8	6	
17	Fever, Typhoid	539) Males Females.	284 255	8	21 15	17 16	20	20 15	13 13	17 11	33 22	49 36	47 47	23 28	16 20	
18	Fever, Typho-(14	(Males	6 8	2	···i	i		;		1 2	2	i		1 2		
19	Fever, Typhus	2	(Malas	1 1										1	1		
20	Glanders) Males) Females.														
21	Measles	121	Males Females.	58 63	2 2	2	5 8	12	3 6	4 8	8 7	4 8	2	6 5	8 2	6	
222	-German(Rötheln)	. 1) Males Females.	i					î								

^{*} Stillbirths are included in this total and appear in the ages 0 and 0-4 on the opposite page, as follows: males, 687; females, 520; unknown sex, 47.

returned as causes of deaths in Michigan during the year 1896, showing sex, months of decedents from each cause.

Age		year lve.	s un	der				A	ges c	of de	ced	ents	by fi	ve-y	ear	peri	ods,	1896.					
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80	Unknown.	Line number.
3.000 2,300 52	446 438	265 220	155 150	138 125	4, 004 3, 233 52	403 365	264 259	347 412	393 566	413 462	349 396	353 433	359 328	378 343	466 393	494 358	638 406	645 494	708 530	653 449		148 107 5	1
1, 657 1, 328 2	403 391	233 190	133 136	105	2,531 2,153 2	334 332	193 242	255 375	317 518	295 432	262 366	285 400	276 296	307 310	385 364	424 329	555 373	582 461	657 481	594 415	733 534	86 66 1	1
232 252	99 125	99 79	72 78	56 56		171 184	85 127	120 220		148 200	113 158	97 189	78 68	77 62	68 50	50 47	52 87	55 48	51 28	38 20	25 19	18 14	+
36 37	12 22	9	4 2	2	63 67	11 10	14 49	58 151	125 198	99 146	86 122	69 100	64 54	59 52	54 43	42 38	47 29	45 34	42 23	31 15	18 12	14	15
52 55	3	1	1 2		57 63	3	1	5	17	3	1	1 3	1	1		1	2	2	1	2	:1	1	+
37 33	1		==		38 34	·i										1			1			-i	+
6	1 2	1	i	<u>i</u>	8 18			1	i		1	;		1:::						1			+
3 5	i		1		4 6	i		1			::::	1		1			i				i	***	+
6	1		i		7 5	3	i	3	1 6	3 4	<u>i</u>	2	1	-			2	2		1		17	+
1	<u>i</u>				1		3		2 2	2		2	_i	i	1		i	1	1				+:
37 30	16 19	25 14	13	8	99 83	16 10	i	1								<u>i</u>	:						+
4 3	4	4 5	3 2	3	18 14	7 7	2	i													1		+
23 22	21 30	34 30	35 46	30 32	143 160	97 111	35 37	16 12	5 5	6	1	2	2	1			1	2	2		i	2 2	+:
8 15	2				10 16	2	1	3	1 3		1	1 3	1		1	<u>i</u>	1	3	2 2	2 3	22 22		+
	::::	::::		::::				7	11	10	<u>9</u>	6	3		:								+
10 5	6	8 7	3 7	3 2	30 27	15 17	3 5	i	2	····i	<u>i</u>	1	::::			₁		1			***	:::	4
3 5	1 2	3 4	7 3	4 3	18 17	18 16	28 26	34 43	41 41	41 28	22 20	21 18	10	17 7	12 6	7 6	5	3 6	5	3 2	2 2	2 2	1
				i	i	_i	3	1	3	2	1										1		1
	:::			::::				i		1	****	::::											3
	:::		::::		:			:								-		-					15
16 21	18 15	11 10	2 5	3	50 52	1 5	2	2	2	<u>i</u>		i		2	::::		1				~-i	***	4
-			<u>i</u>		i							200			0.4								1:

Table 63B.—CONTINUED.—Important diseases returned as causes of

1		1896.		by					Mo	nths	of d	leatl	1, 189	96.			
Line number.	Causes of deaths, 1896.	Total deaths, 1	Sex.	Total deaths sex, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Tabadan
23	Smallpox	13	Males Females.	11 2	1	7	2	1							223		1
4	Chickenpox	1	Males Females.					···i			:::						
5	Whooping cough	158	Males Females.	68 90		47	6 9	2 3	5	7 12	9	9 17	12 5	4 8	5 4	7	
6	Bladder diseases	83	Males Females	78 5		8	3	9	6	8	4 2	9	7	9	7	5	
7	Calculus	21	Males Females.	20		2	1	1	3		3	1	::::	3	2		1
8	Cystitis	41	Males Females.	38		3	1	7	1	6	1 2	3	4	2	5	5	
9	Bladder diseases, etc	21	Males Females.	20 1		3	1	1	2	2	::::	2	3	4	::::	::::	
0	Bowel diseases	1,803	Males Females Unk	1,005 794 1	21	45 29	45 37	61 34	50 43	82 60	142 126	285 179	156 124	67 68	49 40 1		
1	Bowels, Inflammation of	344	Males Females.	185 159	13	11 12		11 13	11 12	14 11	22 22	24 19	26 14	15 14	14 13		
2	Diarrhea	212	Males Females	121 91		3	4 2	5	5 2	8 7	22 19	33 32	21 14	6	9 2		
3	Cholera infantum	651	Males Females. Unk	351 299 1	3	9	9	12	13 13	23 19	52 51	125 92	76 55	16 23	7 11 1	5	
4	Dysentery	76	Males Females.	38 38		1	1	1	1	5 3	3 7	17 13	3 9	3	1	1 2	
5	Peritonitis	107	Males Females.	50 57		5	5	7	3 6	7	3 6	6		4 6	3	5	
6	Bowel diseases, etc	413	Males Females.	263 150			20 11	25 7	17 10	25 19	40 21	30 17	26 24	22 14	18 10		
7	Brain diseases	1,876	Males Females .	1,065	84			88 69	78 61	76 68	82 84	95 81	105 69		100 66		
18	Apoplexy	337	Males Females.	215 122		11 13		23	19 11	12 11	12 12	17 6	22 8		21 15		
19	Brain, Congestion of	65	Males Females.	40 25			3	2 2	- 3	2	6	5 3	1 2	2	8	2	
ю	Brain, Inflammation of	298	(Males	169	10		9	19 11	10	15 8	16 15		22 12		9		
1	Epilepsy	59	Males Females.	34 25			5 4	3	3	2 3	3	2	2			4 2	
2	Meningitis	192	Males Females	101			9	12 10	6 7	9	10	8 7			7	12	
3	Paralysis	745	Males Females		29				31 20	29 27	35 32				38 32		
14	Brain diseases, etc	180	Males Females	106		11	7 5	7 3	9 7	9	11	9					

deaths in Michigan, 1896, by sex, months of deaths and periods of age.

ge	s in	year ive.	s ur	der			•	A	ges	of d	ece	lent	s by	five-	year	r per	iods	, 1895	5.		0		
0.	1.	2.	3.	4.	o to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unknown.	Tine number
1	1				2				4 2	4	1												*
-				i	i							!											3
41 59	15 21	4 3	4	3	67 87	1 3																	1
3	2		1		. 6	2			1	1	2	1	1		2	4	10	8	11	18	15	1	3
1	1				2						2	1	1			1	4	1	3	3	2		3
	1		1		2	2		****	****	1					1	1	5	6	5	5	10		
2					2	1			1			1			1	2	1	1	3			1	
194	104	33			649	40		24	30	18	1			12			30	26				9	
1	93	22	4	4	517	25	16	19	29	26	17	13	7	10	10	18	14	20	12	25		7	
59 40	11 12	8	4	2 2	84 58	15 14	5 10	8	10	5 11	5 9	5	3 4	1 4	6 2	6	3 4	10	63			1	
69 53	14 17	4 2	***	1	88 72	3	1	2	1	i					1	2 2	5	7	3			4 2	
268	59 50	13 12	3 2	3	346 295	4											1					3	1
16	3	3		***	1 22	1								1									
16	3	1	1	i	22		****		1	1					2	1	2	2	2		4		
1	4			¨`i	2	2	4	5	11	10	6	8	3 2	1	1	1	1	3	3	1		::::	
80 53	13 11	3	1	3	102 68	16	6 3	11 5	12 8	9	8	5	9	8 5	9	8	20	6	10	5	14	1	1
97	40 34	18 19	15 14	6 14	206 178	33 36	17 20	17 17	10 18	14 15	24 19	36 22	23 25	39	45 84	72 44	91 52	111 69	127 84	103 71	90 70	5	1
3	:::			::::	3			1 3	5	1 2	7	5 4	3	10 5	13 11	24 10	30 16	37 10	35 18	24 16	23 9	1	3
13	3 5		2	1	19 10	3 2	2	2	2	i	2	1	1	5	1	4	i	1	1 3	2			1
55 52	22 16	10 7	6 3	1 5	94 83	14 17	8	6	5	5 2	2 3	5 2	3	6 2	3 2	5	6	5 2	1		i	3	1
1	i			1	2	1	4 2	3	2 2	4 2	2 4	2 2	4	1	2	1	5 2	1	1 1			1	3
41 28	12 11	5	4 8	3 5	65 59	10 10	5 4	6 2	4	1 2	3	2 4	1 2	2	2	3	1		1	1		i	1
1 5	i	2 3	2	i	5 10	4	5	3	2 2	1 3	5 4	10	7	12	20 14	31 29	40 30	57 49	76 56	69	61 55	1 3	1
13	3	1 2	1 2	2	18 12	5 2	i	i	1 2	9 9	6	11	3 5	5 7	6	4 3	9	10	12	7 5	6 5	1	3

Table 63B.—CONTINUED.—Important diseases returned as causes of

		ا بد ا		<u> </u>	ī												_
		3, 1896.		ths by				Mo	oŋt	ths	of d	leatl	1, 189	Ж.			
Line number	Causes of deaths, 1896.	Total deaths,	Sex.	Total deatl sex, 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
45	Cancer	780	{ Males } Females.	325 455		20 29	26 30	26 38	22 29	26 38	29 35	21 46	38 42	35 55	24 34	30 43	4
4 6	Tumor	161	Males Females.	43 118		• 3 7	9 10	1 14	2 9	4 10	3 14	3 11	3 7	6 13	4 4	4 12	
47	Childbirth	243	Males Females.	243	15	21	25	19	23	18	24	13	18	23	17	27	
48	Convulsions	506	{ Males { Females.	287 219	15 19	30 24	23 17	22 18		24 17	23 13	26 17	29 20	23 17	21 19	29 13	2
49	Diabetes	122	{ Males { Females.	72 50	6	8 4	4 5	5 4	6	3 2	8 4	8 6	7 5	9 8	7 3	1 7	
50	Dropsy	442	Males Females.	203 239		15 11	15 13	14 20	14 17	16 21	19 26	24 22	17 22	19 21	15 18	22 29	1
51	Fever (unspecified)	87	{ Males Females.	43 44	5	4	2 2	3	3 5	3 2	5 3	4 3	7 7	5 3	2 5	3 4	1 2
52	Féver, malarial	101	Males Females.	48 53		2 5	5 1	2 4	3	1 2	3 6	8 4	8 13	3 6	6 8	6 5	
53	Heart diseases	1,491	{ Males { Females	832 659		57 51	69 61			59 4 1	64 4 3	84 4 2	78 66	84 61	87 56	87 71	4
54	Pericarditis	77	{ Males { Females.	39 38	47	2	5 5	4 4	2 2	1	6 2	3 4	3 4	3 3	6 2	2	
55	Heart disease, etc	1,025	Males Females.	571 454	29 32	44 34	40 37	38 43	39 31	41 30	41 30	60 26	53 47	. 54 42	63 44	66 57	3 1
56	Heart failure	389	{ Males { Females.	222 167	9 16	13 15	24 19	19 19	15 12	17 10	17 11	21 12	22 15	27 16	18 10	19 12	1
57	Influenza	248	Males Females	120 128		15 27	20 30	14 18	10 6	7	3 3	12 5	3 4	1 5	12 12	14 10	
58	Kidney diseases	62 4	Males Females	457 167		32 8	28 14		33 16	28 11	44 12	38 19	50 11	46 14	4 1 12	4 2 23	- <u>.</u>
59	Kidneys, Inflam'ation of	478	Males Females.	351 127		26 8	20 11	26 11		25 8	35 7	27 15	36 9	34 11	32 7	34 18	ï
60	Kidney disease, etc	146	Males Females.	106 40	7 3	6	8	7 1	12 6	3	9 5	11 4	14 2	12 3	9 5	8 5	
61	Liver disease, etc	203	Males Females.	105 98	8	9 5	9 3	9 8	7 11	6 9	6 3	7 6	13 16	12 13	6 8	13 7	-ī
62	Lung diseases	1,889	{ Males { Females	1,068 821	79 60	109 96	156 112			48 30	43 43	46 28	56 34	94 67	108 76	1 4 1 109	1
63	Asthma	74	Males Females.	45 29	2	3 4	5 1	3 5	4	2	4	6 1	5 1	4 2	4	4 8	
64	Bronchitis	181	Males Females.	93 88		7 7	8 7	9 12	7 5	3	6 4	3 4	3	15 10	10 7	15 17	
65	Pleurisy	37	Males Females.	18 19	1	2 3	1 5	2	1	3 1		<u>1</u>	2	2 2	1 3	3	
66	Pneumonia	1,386	{ Males { Females.	790 596		86 74	128 94		49 53	34 22	27 35	25 17	35 25	62 44	78 53	107 70	1
67	Lungs, Congestion of	54	{ Males { Females.	34 20	2 3	2 3	4	4 1	1 3	1 1	2	1	2 1	3 3	8 1	4	
6 8	Lung diseases, etc	157	{ Males { Females.	88 69		9 5	10 5	6 6	5 9	5 3	4 3	11 5	9 4	8 6	7 12	8 7	

deaths in Michigan, 1896, by sex, months of deaths and periods of age.

Age	s in	yea five.	rs u	nder				A	ges	of d	eced	dent	s by	five-	year	per	lods	1896	3.		r		
6.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unknown.	Line number.
2			1		3		1	4 2	1 6	3 11	2	16 30	11 38	23 64	28 51	42 63	51 53	52 44	39 36	24 26	18 15	7 3	}4
4 2	1 3	i	1	1 2	7 8	2	5	1	.1	8	1 11	27	1 12	2 14	2 12	8	3 13	5 5	4 6	5	3		14
								16	48	54	34	53	29	3	i			::::				5	}4
213 163	27 25	16 6	5 4	2 3	263 201	4	1	3	1 2	2	2 3	i	2	1		2	·i	i	1	1	3	2 2	14
3	1		1	2	7	1 3	5	1 3	2 3	4	3	3 4	2	2 8	7 6	4 2	6	5 6	7 2	9	6	1	154
4	1 2	2 2	2	1	8	2 2	1 3	1 4	6 8	4	4 3	4 8	5 12	6	18 21	13 14	18 18	17 33	25 38	33 27	34 28	4 2	31
12	2	3	24	2	19 14	4	2	1 6	4	2 2	2 2	1	1 4	3		₁	2	i	2	3	i	1	1
1 7	1 3	1 5	2		6	3	3	4 7	47	1 2	4 2	3	2 2	6	2	2 2	2	5	i	2	2		3
41	2	1 2	2	2	48	6 14	6 14	13 11	13 20	20 22	20 27	20 27	37 23	42 44	66 59	61 48	88 62	124 79	98 81	97 41	64 39	9	1
1			1	i	2	2	1	₁	3		1	1 2		4	4 6	4	4 4	4 4	5 6	9 2	1 3	2222	2
17 19	2 3	<u>i</u>	1	2 2	22 26	4 10	3 11	11	9	18 17	8 18	14 21	26 18	28 27	52 42	42 36	64 46	88 53	66 51	63 23	47 28	6 3	1
23 12		1		i	24 14	2 2	2 2	2 4	1 2	2 5	11 8	5 4	11 5	14 13	10 11	15 11	20 12	32 22	27 24	25 16	16	3 4	1
12 14	4 3	3	3	2	21 20	1 2	3	2	3 2	7 3	3	3	3	3 2	3 8	2 4	3 7	6 15	17 13	15 23	27 18	1	1
8 2	1	2	1	<u>-</u> 1	12	8 2	5	13	8	10	13 14	19	22 12	21	27 20	31 10	57 13	48	68 14	46 6	46	3	1
4		1	1	i	6 3	5 2	5	12	5 14	8 9	11 12	13	19	20	24 10	25	45 9	37 10	52 11	31 6	30	3	3
4	1	1			6	3	···i	1	3 4	2 2	20	6	3 4	1 2	3 10	6	12	11	16	15	16		1
14	1	2		1	18	2	2	1 2	1 4	4 3	2	1 8	10	5 7	7 8	15 13	9	16	6 11	5 6	1 2	····i	+
230	90	41 87	15 14	16 14	392 292	35 21	18 27	27 31	27 26	33 28	30 23	44 22	41 21	33 20	52 40	51 80	70 46	36 47	65 56	49 47	52 39	13	1
	1				1								3	2	5 3	2 2	9	4	9	9	1 2	i	+
38 29	12 12	9	2 2	5	66 51	3		1		1 3	2 3	2 3	1	3	3	1 2	4	2 3	7	2 3	2 5	i	2
1	···i	1	i		2 2	2	4	1		2	3	1	1	~i	2 2	1	2 3	1	2				1
160	72 52	28 32	11 10	11 9	282 213	27 15	12 24	22	24 20	27 20	18	35 14	30	27 16	41 26	40 21	49	25 33	44 37	31 39	45 29	11	10
11 8	1 2	1	1		14	3	i		1		₁	1 1		1	1 2	2 1	1		3	4	2 1	1	3
20	4 5	2	1	i	27 14	2 3	2	3 6	2 5	5 3	7	5 4	6 7	i	3 4	5 3	9 3	4	2 8	3	2 2	1	}

Table 63B.—CONCLUDED.—Important diseases returned as causes of

	3.	1896.		by p					Mo	nths	of	leat	h, 18	96.			
Line number.	Causes of deaths, 1896.	Total deaths,	Sex.	Total deaths sex, 1896.	January.	February.	March.	April,	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
69	Rheumatism	167	Males Females.	94 73	7 3	4 5	14 11	3 6	9 5	10	6 3	8	10 6	7 3	6 10	10	
70	Septicemia	198	Males Females.	94 104		7	10	11 13	5 10	7 9	6 8	6 8	7	11 8	6 9	13 6	-
71	Spine disease, etc	121	Males	58 63	8	1	1 5	8	4 9	2 5	6	6	5	6 5	6 3	7 6	0.00
72	Stomach diseases	299	{ Males Females	151 148			12 10	17 14	13 17	14 9	14 13	10 16	22 9	9 12	11 11	14 14	-
73	Stomach, Inflam'tion of.	97	{ Males Females	40 57	9	14	3	2 6	6 5	6 2	2 6	3 5	4 5	2	3	5	-
74	Stomach disease, etc	202	Males Females.	111 .91	6 3	6	9	15 8	7 12	8	12 7	7 11	18 4	7 8	8	10	-
75	Syphilis	21	Males	10 11		i		1 2	4	1	·i	1		1 2	i	1	
76	Unclassified	1,798	Males Females. Unk	922 874 2	75 49	70 63	79 74	68 97	64 70	69 67	71 66	77 82 1	89 75	73 69	92 76 1	92 83	

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CAUSES OF DEATHS BY SEX, MONTHS AND AGES

deaths in Michigan, 1896, by sex, months of deaths and periods of age.

Age	s in	yea five.	rs ui	ider				A	ges	of d	ece	lent	s by	five	year	r per	iods,	1896	i.				
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unknown.	Line number.
1			i		1	2 3	6	6 3	1 4	1 5	1 3	5	2 6	2 3	5 4	6	1.4	9 8	11 9	11 5	8 6		69
8 2		1			9	3	4 2	6	4 16	7	3 13	5 12	5 6	6 5	2 4	7 3	5	10 7	10	2 5	4	2	} 70
21 18	6	4 2	1 2	1 2	33 30	3 5	4 2	1 2	<u>-</u> 5	2	i	1 3	i	1	1	1 2	3	1 3	2	3 4	2 2		} 71
38 26	5 2	1	1 2		45 31	1	2 3	1 6	3 5	2	4 5	3 11	2 7	3 5	10 11	12	15 9	17 14	21 15	6 7	3 4	1 4	172
5	1	1	1		8		2	3	1 2	1 2	2 3	 5	2 3	1 4	3 6	3	2 3	5 7	8	2 2	1	2	} 73
33 23	4	<u>i</u>	<u>-</u> 2		37 27	1	2	1 3	2 3	, 4	2 2	3 6	4	2	7 5	9	13 6	12 7	14 7	4 5	2 3	1 2	174
6	i				6				i	2			1	1				2					} 75
183 146 1	16 18	10	6	5 4	214 184 1	11 21	12 6	9 14	13 16	12 17	15 11	8 26	14 11	18 15	23 24	27 11	25 25	29 40	68 70	110 107	307 269	7 7 1	176

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Table 64.—Important diseases and groups of diseases returned as causes of

			_											C	ount	ies-	-Alc	ona
Line number.	Causes of deaths, 1896.	State.	Alcona.	Alger.	Allegan	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie,	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.
1	TOTAL DEATHS	21,983	33	28	378	156	91	50	40	183	535	78	387	248	411	185	72	118
2	SPECIFIED DISEASES	17,521	21	21	317	107	70	42	32	153	425	60	312	217	348	153	54	88
3	Dangerous Communi-	4,258	5	3	67	22	14	10	13	27	129	15	88	49	74	87	10	18
4	Consumption	2,093	3	2	42	11	4	7	10	20	50	9	43	28	48	28	8	10
5	Other tubercular dis-	191			2					2	1		1	5	3	2		
6	Marasmus	76																
7	Meningitis, Tuber	32				1				1				1		1		
8	Scrofula.	16			2													
9	Tabes mesenterica	46								1	1		1	3	2			
10	Other forms of tuber-	21												1	4	1		
11	culosis}	211				2			1		12		6			1	1	
12	Croup, Membranous	51			1						1		2		2			
13	Diptheria	649	ij		3		1		77.77	2	27		99	8	5	2		
14	Erysipelas	62	-			1	1				1		1	1	4	1	2222	
15	Fever, Puerperal	46	3		2						1		1	1	1			
16	Fever, Scarlet	106	n			1000		1			3			3	2		7	
17	Fever, Typhoid	539		1	8	1	1	2	2	3	12	1	8	5		2	1	,
8	Fever, Typho-mal	14		li	1		1				1		2	1				
19	Fever, Typhus	2		ij							1							
20	Glanders										1							
1	Measles	121				4			****		18	3	1		-			
19	-German (Rotheln)	1							-		10						-	-
3	Smallpox	13			****													
4	Chickenpox	1		-									1					
5	Whooping cough	158	2	0	8	2	6				1	2			9	1		5
16	Bladder diseases	83	1			~	0	****		****		-			1	,		'
27	Calculus	21	0		1		****	****		****	3				1	****	****	
8	Cystitis	41	1	1	1						2				1			
29	Bladder disease, etc	21						2464										
30	Bowel diseases	1,803	3	10	23	13	5	- 8	4	12	38	5	22	21	23	9	3	1
31 32	Bowels, Inflammation of Diarrhea	344 212		1	5	6 3	1		i	2	10 4	1	5	3	3	1	::::	
33 34	Cholera infantum	651 76	1	8	7	i	1	4	2	5	13	1 2	7 2	7	9	8	3	1 2
35 36	Peritonitis Bowel disease, etc	107 413	2	ï	1 5	1 2	3	2	1	i	·ii	i	1 6	27	6			

deaths in Michigan during the year 1896, showing their distribution by counties.

Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebie.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	losco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.
200 164	45 26	232 200		187 127	197 148	246 213	116 71	6.5	21 16	214 138	139 124	185 159	285 254	476 339	259 199	380 323	200	98 64		156 124	496 430	414 355	34 25	1,181 989	27 15
49	9	48	7	25	37	43	17	58	2	34	33	37	43	96	69	63	70	14	8	42	104	78	8	211	4
23	3	29	2	6	17	25	9	33		15	18	20	30	34	23	26	40	8	5	24	37	48	3	122	3
		1		4	2	1	2	2			1		4	10		4	3	1	1		3	2	1	14	1
							1		4.															3	
				4									****	4				إن	1			1		2	1
		1						1		****				4				1			1			3	
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3		1	1	5	6	1	••••	2	ं	. 2	2	1	1	4		****	2	3			1	2		10	
		2				••••		1	-	1		1		1		****			••	1	2			6	••
7	1	••••	2	4	1	4		1		1	4	2	2	25	22	1	3			5	37	3	1	14	
1		1	•••			1	1			1	1	1	1			4	2			1	1	2		3	
2	2		••	2		****	••••	2			****	757			1	••••	****	1			2	2		2	
7	•	1			3	2	****		1	****	****	2	****	1	6					1	••••	1	**	8	
1	2	11	1	3	3	5	4	7	•	7	4	8	5	5	12	23	17	**	-5	5	15	10	2	23	7
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		****	• •				****		**	****			****			****						****	•		
4		2	1		5	4	1	1		****		2		3	3	5	2	1	•	1	6		1	8	. 1
		- *	**		****		1	3			***	1	3			4	2	**	**	24.41	4	3	~	7	ï
-		EZ					1,11	2		****		1	3			2 2	2	Č.			· i	3	**	5	::
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17	2	14	2	26	56	14	7	44	5	30	12	17	20	44	22	31	20	10	5	16	39	25	3	90	4
2	2	2	2	7	7	3	2	7	1	3	1	3	5	9 20	8	6 2	1	1	1	2	8	6		18 13	
10 1		5		9	46	4	5	17 4	4	10 15	6	12 1	2	6	11	17	7	7		9 2	12	3	1	26 1	3
- 1			111	100				100	11		10.00	100											100	100	

Table 64.—Continued.—Important diseases returned as

l														Joun	ties-	-Ale	20
	Causes of deaths, 1896.	State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.
	Brain diseases	1,876		2	48	13	9	1	1	15	38	4	28	32	46	17	5
	Apoplexy Brain, Congestion of	337 65	::::		8	2				4	6 3	2	7	6	11		
	Brain, Inflammation of Epilepsy	298 59		2	6 3	5			1		9			1	2	1	ĩ
	Meningitis	192 745 180			2 17 7	1 1 3	27	i	===	8	4 12 1	2	2 16 2	20 20 2	3 23 6	15	4
	(Cancer	780	1		15	4	1	2	2	8	13	5	13	10	18	9	
ŀ	Tumor	161			3					3	2		6	2	4		1
1	Childbirth	243	1		3	5	1	2	1	3	9	1	5	1	4	3	
l	Convulsions	506	1	2	4	6	2		1		15	1	7	4	1	4	3
	Diabetes	122			4	1				1	1		2	4	4	1	1
ŀ	Dropsy	442	1		6	5	4	1	1	8	12		7	13	11	5	4
	Fever (unspecified)	87				1	3	2		1	3		3	1	2	1	
	Fever, Malarial	101			5	2	1	1			3	1	1	1			
	Heart diseases	1,491	1	2	26	8	4	4	2	19	29	6	24	15	43	27	9
	Pericarditis	77 1,025 389	1	<u>i</u>	4 15 7	₇	3	4	2	4 14 1	18 11	5	14 10	10	4 29 10		8
	Influenza	248		1	6		4			3	3	1	6	6	2	2	
	Kidney diseases	624	1		10	1	3			7	6	5	10	7	17	4	4
	Kidneys, Inflammation of Kidney disease, etc	478 146	1		8 2	i	3			5 2	6	4	8 2	6	12 5		2 2
	Liver disease, etc	203			7		1			1	3	2	4	3	3	4	1
	Lung diseases	1,889	4	1	41	7	9	3	3	17	60	7	26	11	39	11	7
	AsthmaBronchitis	74 181			2 3	2	1 2	::::	<u>i</u>	3	1 5		3 2		1		
	Pleurisy	37 1,386	4	·i	33	4	6	3	2	10	2 44	7	16	8	34	10	7
	Lungs, Congestion of Lung disease, etc	54 157			1 2					3	8		2 2	2	1 2	i	-
1	Rheumatism	167			2	2	2			4	2	3	6	3	11	2	
	Septicemia	198			4	2	1	1	2	3	3		3	4	4	3	1
1	Spine disease, etc.	121					2	2		1	4	1	2	1	1	2	
١	Stomach diseases	299			12	2	1			2	12		4	7	3		
	Stomach, Inflammation of. Stomach disease, etc	97 202			3 9		1		111	1	3 9	::::	4	2 5	1 2		
	Syphilis	21									1						
l	Unclassified	1,798	2		35	13	3	5	2	18	36	6	45	22	37	12	5

causes of deaths in Michigan during the year 1896, by counties.

Clare.	Clinton.	Crawford.	Delta.	Dickinson.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebie.	G'd Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.
1	27	2	10	4	25	13	49	2	8	20	18	23	23	13	37	40	4	2	8	78	75	2	185	1
	10 01		3		2	1	7		1		4	4 2	5	2	7	7	1		1	25 1	19		27 5	
	1		4	3	1	2	5 4	1	2	2	1	i	7	3	3	4	1	1	1	3 2	1 5	1	18	
1	2 15	2	3		4	4 5	3		4	3	3	1	1	1	3	4 20	;		2 3 1	13	3 33	1	18 51 7	
	1		**	1	12		28	1		15	8 6 3	13	6 2	1 5 1	20	4	1			31	12		- 1	1
2	9		2	1	10	2	26	****	1	4	6	6	11	8	8	14	1		3	16	25	1	54	1
	1	1			3		4	****		2	2		10	1	4	1		1	1	1	3		7	
-	1		1	3	2		1		2	2	****	3	12	5	9	2	4	1	6	4	2	****	7	
1	3		2	1		4	5		6	••••	*	1	13	12	1	2	1	2		2	4	1	24	
	4	4	1	1	. 3	••••	4	1		1	1	4		2	4	2	****		1	5	3		5	
2	5	1	4	2	3	1	12	1	2	3	2	13	1	4	7	7	2		1	4	6	1	22	
-			1	1	1	****	9	****	****	****		1	3		1	1		•		••••	1		5	****
	1		••		1		. 4	****	****		1	2		1	1	5	****	••••	1	1	5	****	1	••••
4	19	-	8	3	33	6	41		9	16	19	-37	14	10	38	19	3	5	6	36	31	2	92	- 4
4	10 7		5 3	2	21 10	1 5	31 10	::::	5	14	12	19 19	10	6	26 12	14	3	5	4 1	26 7	24 6	2	78 12	
3	15						6			2	5	4	4	2	12	6			2	3	4	*	5	
	10		5	1	14	6	16	1	1	8	7	13	13	5	11	11	1		7	25	16	2	32	
	7 3		5	10	10	100	13	1	1	5 3	6	10	10	3 2	10	10	1		6	18	14	2	22 10	
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1	23	9	31	26	14	7	66		33	10	15	14	56	21	46	20	2	11	10	30	33		116	
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	2		2		5	1	6	1		3	3	1	3	2		5	2		1	2	5		11	
	1	1			4		3			1	6	11	3	2	6	1	1		2	2	1		18	
	1	2		2	3		1		1		1	1	1	3	3	1	2		3	7	1	1	6	
	1	-	2	1	2		11		1	3	1	3	2	5	3	4	4		8	6	7	1	15	
		3 -	1		2		5		·i	1 2	i	3	2	3	1 2	1 3	2		2	2	7	1	8	
												1		****							1		5	
1	1 19	9 .	. 1	9	30	6	65		9	4	15	44	24	11	31	20	12	4	8	58	24	3	106	1

Table 64.—CONTINUED.—Important diseases returned

															(oun	ties-	-La	k
Line number.	Causes of deaths, 1896.	Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinae.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montealm.	Montmononon
1	TOTAL DEATHS	35	205	90	422	132	33	69	317	312	553	158	154	343	108	46	333	292	3
2	SPECIFIED DISEASES	25	163	61	373	118	26	52	267	233	415	110	126	237	88	26	277	230	1
3	Dang rous Commu-	5	37	28	80	15	6	16	69	68	107	19	36	93	24	8	85	58	
4	Consumption	2	21	15	59	10	5	10	32	20	39	12	21	20	7	2	46	32	
5	Other tubercular diseas s		1	1	9				3		15		4	1	1		3	3	
6	Marasmus								1		11								-
7	Meningitis, Tuber.				1				2		4				****		1		
8	Scrofula													1		****	1		
9	Tabes mesenterica												3		1		1	3	ı
0	Other forms of tuberculosis		1	1	1								1						ļ.
1	Croup	1				****	****		4	11	3	1	1	3	****	1	2	1	ŀ
2	Croup, Membranous		1	1		****			4	1			2	1		****	3		ŀ
3	Diphtheria		1	5	6				15	8	31	1	1	35	7		6	10	
4	Erysipelas		1		2	1	<u></u>			1	1	2			2	1	2	2	
5	Fever, Puerperal			1	1				3	2					1		4		ŀ
6	Fever, Scarlet			.,,,						1	1	1	1	1				2	l
7	Fever, Typhoid	2	12	2	9	3		2	5	19	12		4	27		3	16	5	1
8	Fever, Typho-mal								2			1							ŀ
9	Fever, Typhus		200																
0	Glanders																		
1	Measles			3	1	1	1			4	1			5	1			1	
2	-German (Rötheln)						***												
3	Smallpox																		
4	Chickenpox																		
5	Whooping cough							4	1	1	4	1	2		5	1	3	2	
б	Bladder diseases		1		2	1			2		1	1					5	3	
789	Calculus		1	***	2	 1					1	1					14	3	
0	Bowel diseases	2	18	3	29	10	2	6	14	29	67	16	15	28	15	2	24	21	
1 2	Bowels, Inflam'tion of. Diarrhea		3 2		1 2	3		1 3	6 2	9	17	4	2	3 8	1	1	4 6	6 2	
34	Cholera infantum Dysentery	1	11		11	3	2	2	4	7	35	3	10	4	11		8	7	1
5 6	Peritonitis	i	2	3	10	1 3			2	5	9	5	2	111	3		6	1 5	

as causes of deaths in Michigan during the year 1896, by counties.

Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	Sanilac.	Schooleraft.	Shiawassee.	St. Clair.	St. Joseph.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.
361 283	111 83	370 286	135	18	56 33	118	17	39 27	321 262	36 21	8	957 798	259 191	50 35	224 198	441 350	250 207	257 202	307 263	421 361	4,014 3,091	117
95	23	46	28		12	85	2	-4	65	4	2	164	51	8	32	103	46	31	56	60	837	16
40	14	33	20		10	15		1	40	1	1	93	27	6	21	42	38	19	35	47	301	10
	1	1			1	1		****	2			4	3			1					68	
												1									59	
	****	-44-			1							1	1		****	1					3	
		****				1	••••									••••						
•	1		****				****		1	****	****		2			****	****				3	
		1	****				****		1	****	****	2		****	****						3	
3		2	1	****	****		****	2	3	****	****	9		****		3		***	2	1	89	2
28	1	3	-	****		6	2		9			15	8		4	17		2	1		211	****
2	1	0		****		3	·	777	1		1	10				2			2	1	211	1
~									2			2	1			~			3		4	1
7		2	1					77	1			1		7770		19				1	27	
11	3	5	4		1			1	4	3		22	8	1	. 5	15	4	3	11	8	78	2
1												2	1									
1	2					4			1			3			1		1	4	1		17	
												1										
																1					12	
		4.						-222						ă.,			44					
2	2		1	****		6			2		0200	6	2		1	3	3	3	1	2	23	1
2		1							1	1		4	1			2	2	1	3	3	10	2
		·i						,	1	1		2	1			***	1	<u>i</u>	1 1	1 2	3	2
1								35				2				2	1		i		5 2	
27	8	25	8	1	8	8	8		20	8	2	87	10	4	27	34	14	24	23	25	347	12
6	2	1	1	1		2	1		7 3	1	1	25 6	1	1	6	12 2	2	8	6 2	2 3	43 59	2
3	5	8	3		8	3			5 2			29	6	1	8	14	5	12	10	14	81 12	7
		117	***	44-4	7	-		****			****			****		2		****	1	1	79	
8	1	3 5	4			2			1 2	1		2 23	2	2	7	4	5	4	4	3 2	19 133	2

Table 64.—CONCLUDED.—Important diseases returned

															C	oun	ties-	-Lal	K
	Causes of deaths, 1896.	Lake.	Lapeer.	Leelanau.	Lenawee.	Livingston.	Luce.	Mackinac.	Macomb.	Manistee.	Marquette.	Mason.	Mecosta.	Menominee.	Midland.	Missaukee.	Monroe.	Montcalm.	Montheaner
-	Brain diseases	2	14		43	16	1	6	31	16	39	17	14	13	7	1	29	25	
	Apoplexy Brain, Congestion of	1	6		4	5	1	1	6	2 2	4 2	2	3	2	2		1	3	
	Brain, Inflam'tion of Epilepsy		2		4	1		3	14	5-1	4 2	5	4	2	1	1	10	5 2	
	Meningitis Paralysis Brain disease, etc	ī	2 4		28 6	7		i	1 7 3	2 2 2	18 5 4	3 6	6	3 1 5	4		1 14 1	5 9	
	(Cancer	3	8		22	6		1	14	6	17	6	7	8	5		12	11	
l	(Tumor	1	5		4	3			4	2	3	2	1				1	1	
l	Childbirth	1	1		6	3		5	2	5	2	3	2	2	3	1	10	6	
l	Convulsions	1	2	1	8	1	2		4	9	13	4		32	2	1	7	1	
	Diabetes		5		4	1		1	2	1			1	3				1	
	Dropsy		6	2	13		1	1	14	4	1	1	6	1	2		6	6	
	Fever (unspecified)		1	6		2		2		15	1				1			1	
	Fever, Malarial								4	1		2	2				2	2	1
	Heart diseases	3	18	5	45	17	4	5	24	8	19	5	8	10	8		18	16	١
	Pericarditis Heart disease, etc. "Heart failure"	3	2 14 2	1 4	3 32 10	12 12 3	1 3	5	3 14 7	5	19	4 1	4 3 1	2 7 1	1 3 4		2 5 11	6 7 3	1
	Influenza	1	4		4	4		1	3	2	4		1	1			10	5	1
	Kidney diseases		3	2	13	3		2	8	2	10	7	8	. 6	2	1	7	4	
	Kidneys, Inflam'tion of Kidney disease, etc		3	1	6 7	2		2	8	2	7 3	6	8	3	1	<u>i</u>	5 2	3	
	Liver disease, etc		3	2	1	2			1	4	2	1	2				2	7	
	Lung diseases	1	16	5	46	10	1	1	23	36	77	12	6	17	- 5	6	12	22	
	AsthmaBronchitis				5	2			3	1 2	26		i	2			2	1	
	Pleurisy Pneumonia	····i	15	5	36	7		i	15	33	3 43	9	5	12	4	 5	<u>-</u> 8	19	1
	Lungs, Congestion of Lung disease, etc		1		3	1	·i		4		2 3	2	::::	3	1	i	1		
	Rheumatism	1	2				1		2	2	2	2		1			4	3	
	Septicemia		1		6	3			4	4	6	1	1	1	3		4	4	
	Spine disease, etc			2		2	1		2		1	2	1		3		3	2	1
	Stomach diseases	1	3		9	1			2	4	4	3	7		1		3	-8	-
	Stomach, Inflam't'n of Stomach disease, etc.	· · · · i	1 2		1 8				2	1 3	1 3	3	4 3		i	::::	1 2	5	
	Syphilis											***							1
3	Unclassified	. 8	15		38	18	1	= 5	38	17	39	6	8	21	7	6	33	23	4

as causes of deaths in Michigan during the year 1896, by counties.

			4						V.	ø	d			i.	oj.	00							10
Muskegon.	Newaygo,	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	Sanilae.	Schoolcraft.	Shiawassee.	St. Clair.	St. Joseph.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.	Tine number
24	7	57	. 9		3	8	2	2	32	1	1	73	13	8	28	36	41	24	39	52	252	6	
10	1	7	1		1	3			6	i		10	4	1	1	9	5 1	8	6	7	45 12	5	3
4	1	2	3		2	5	2	1	9			14	5		9	8	3 2	2	3	6	73 1		4
2 5 2	1 3	3	2			3		1	1 15		i	14 19	 2 1	2	3 14	15	27 27 2	1 8 3	3 23 3	3 32	32 73 16	1	4
11	3	22	3	. 1	••••	6		4	15	***		56	9		5	10	14	11	11	3 24	131	3	4
2		3							3	1		12	5			1	1	1	4	12	25		1
2	2		6	1	1	2		1	1	1		7	3	1	5	4	2	5	2	3	31		4
4	1	3	1		3	4			1			35	1	1	3	2	3	2		8	194	4	1
1			2	1		1			2			8			2	- 4	3	4	2		12		1
10	6	5	1	3		2		3	10	3		12	7		7	10	8	7	13	7	75	3	1
1				****					2			3	1	1	1	2			1		5	1	
		1							1	1		5	2			7	2	5	2	1	21		P
26	7	31	13		_ 1	4		4	22			66	14	4	29	28	20	28	35	44	200	72	П
19 5	1 4	23 6	1 7 5		ī	3		3	20	100 100 200		47 15	13	4	1 22 6	18 9	17 3	15 13	27 6	31 10	137 61	7	
		3	4		1	2	1	1	3			6	6		10	6	-8	2	9	4	41	1	1
9	.5	13	3	2	1	5		1	11			31	9	****	7	11	9	14	10	17	101	1	ı l
5	3 2	7 6	3	2	1	3 2		1	8	:		26 5	6 3		6	9 2	7 2	13 1	7 3	14 3	79 22	1	
2		7				3			5			17	1		4	4	3	1	2	4	27	2	2
22	4	32	10			13	22	3	39	1	1	90	21	7	15	26	- 6	11	25	21	355	9	
2	i	1				1			3		···i	14	i	::::	1 3	2 2	::::	1	···i	1	18 39	i	1
27	3	27 27	9		****	9	3	2	23	<u>-</u> 1	::::	63	1 19	14	7	1 20	5	10	1 20	18	10 247	š	10
1 2		i	1	1211		2	G.,		2	555		3 9		2	1 3		1		3	···i	6 35		6
	1	1			1	1			2			3	2		5	5	3	2	4	4	19	1	6
	1	1	1		2				2			4	5		2	2	4	2	3	3	29	2	7
4	3	1	1					1	1			3	6			6	1		1	5	11	1	7
2		4	1			3		1	3			19	1	3	2	10	4	6	3	8	50	8	7
1		1 3	1			1 2		···i	2			7 12	<u>i</u>	3	2	28	1 3	4 2	1 2	3 5	12 38	1 2	25.50
			1	****			****	****		****										****	12		7
29	12	38	8	2		10	2	2	28	5	1	93	23	3	10	37	13	21	15	56	306	8	ŀ

Table 65.—Important diseases and groups of diseases returned as

ON,												7	Years,
Pilae	Causes of deaths, 1869-96.	1896.	1895.	1894.	1893,	1892.	1891.	1890.	1889.	1888.	1887.	1886.	1885.
1	TOTAL DEATHS	21,983	22,757	20,959	21,982	21,729	22,079	21,642	20,315	21,764	19,482	18,187	16,646
2	SPECIFIED DISEASES.	17,521	18,467	16,975	17,911	17,578	18,115	17,612	16,767	18,114	16,257	15,305	13,766
3	Dangerous Communi-	4,258	4,591	4,387	5,053	5,029	5,180	5,254	4,762	5,483	5,249	4,976	4,431
4	Consumption	2,093	2,396	2,206	*2,154	2,080	12,060	2,207	2,137	2,424	2,127	2,051	1,964
5	Other tubercular dis-	191	254	227	* 196	208	176	199	116	141	142	150	147
В	Marasmus	76	125	92	* 89	109	90	74	16	30	21	57	60
7	Meningitis, Tuber	32	29	41	* 38	33	27	41	43	47	62	40	34
B	Scrofula	16	21	23	* 21	17	16	34	26	22	27	25	25
9	Tabes mesenterica	46	60	57	* 27	37	23	32	21	31	24	21	19
0	Other forms of	21	19	14	* 21	12	20	18	10	11	8	7	9
1	tuberculosis 5	211	136	136	217	211	253	415	* 357	384	282	296	291
2	Croup, Membranous	51	47	44	42	80	35	56	* 46	90	117	104	46
3	Diphtheria	649	594	642	959	1,020	1,060	1,266	849	723	935	1,117	1,054
4	Erysipelas	62	68	43	57	64	66	46	52	82	70	63	68
5	Fever, Puerperal	46	32	33	42	42	35	26	32	51	33	30	38
6	Fever, Scarlet	106	116	163	360	442	400	222	240	323	318	319	245
7	Fever, Typhoid	539	660	536	689	626	684	465	637	638	770	+ 498	387
B	Fever, Typho-mal	14	23	22	28	23	16	27	* 43	31	52	25	7
9	Fever, Typhus	2	6	2	4	6	7	11	4	3	7	2	1
0	Glanders					1							
1	Measles	121	44	84	127	72	225	+ 229	104	414	285	129	38
2	-German (Rötheln)	1	2	2	1	2						*	
3	Smallpox	13	71	85	3	1	1	6	3	3		6	3
4	Chickenpox	1	2	4	2	4	4	4	2	2	1	1	4
5	Whooping cough	158	140	158	172	147	158	75	140	174	110	185	138
8	Bladder diseases	88	51	43	41	50	32	33	40	29	49	40	41
7	Calculus	21	11	13	10	11	12	10	7	14	17	12	21
8	Cystitis	41 21	24 16	25 5	25 6	22 17	17	12	20 13		24 8	23 5	15 5
0	Bowel diseases	1,803	2,193	2,060	2,035	1,631	1,900	1,844	1,961	1,947	1,818	1,726	1,210
1 2	Bowels, Inflammation of Diarrhea	344 212	339 323	396 234	433 371	334 277	353 292	315 325	352 450	390 371	339 414	327 378	324 261
3	Cholera infantum Dysentery	651 76	971 100	891 100	833 79	606 74	799 89	592 128	722 158	767 153	626 183	653 158	360 105
5 6	Peritonitis	107 413	125 335	102	83 236	89 251	116 251	98 386	50 229	46 220	35 221	32 178	22 138

Note.—The arrangement of causes of death is uniform in Tables 63-67. See text beginning on page 158, to which reference may be made by line numbers.

causes of deaths in Michigan for each of the years 1869-96, inclusive.

1869-9			_		-										-	e No.
1884.	1883.	1882.	1881.	1880.	1879.	1878.	1877.	1876.	1875.	1874.	1873.	1872.	1871.	1870.	1869.	Line
18,056	16,906	16,425	19,238	16,102	14,402	12,766	12,919	12,576	11,990	12,500	14,258	13,371	9,728	10,766	9,145	
15,133	13,664	13,366	15,922	13,024	11,516	9,922	10,076	9,901	9,257	9,870	11,798	11,243	7,911	8,824	7,292	3
5,058	5,082	5,279	6,533	5,262	4,857	3,919	8,883	3,569	3,271	3,322	4,028	4,065	3,082	3,561	2,645	Ti
2,198	1,992	1,804	1,954	1,829	1,680	1,641	1,664	1,590	1,479	1,392	1,447	1,467	1,303	1,451	1,233	
183	126	162	174	144	112	125	138	134	128	129	156	149	119	143	80	ID.
44	9	52	37	26	9	6	11	8	3	8	10	3		1		
49	48	48	64	42	43	55	60	68	60	59	81	84	65	65	11	
42	25	29	31	32	36	33	32	26	34	23	43	40	38	60	55	
34	32	26	36	28	16	16	23	22	19	28	15	15	12	9	8	
14	12	7	6	16	8	15	12	10	12	11	7	7	4	8	6	1
285	284	303	316	257	233	199	145	157	156	132	166	153	146	124	105	1
40	52	48	64	65	45	37	19	21	11	10	6	10	9	3		1
1,065	1,007	1,416	+2,063	1,542	1,480	889	595	327	* 213	216	219	196	121	121	89	
71	85	82	86	88	92	* 75	69	86	108	104	158	151	87	68	69	
29	45	31	57	39	41	* 16	25	32	42	54	51	44	26	38	21	
326	673	592	384	371	418	429	+ 404	399	423	440	* 580	565	696	852	252	
514	439	463	884	513	397	329	446	428	433	611	* 677	621	357	574	437	
29	11	32	49	9	7	18	4	6			7	1				r,
5	11	10	19	11	* 14	5	29	11	14	16	17	31	8	1	9	
					1	1						1				3
144	258	150	256	125	167	16	62	118	134	46	* 245	180	67	56	147	
								y								
3	5	101	82	3	6	6	+ 102	76	26	18	* 92	302	74	10	42	
1	2	1	3	2	2	1		5	3	1	1	2	1	1	3	1
160	92	86	142	264	162	132	131	181	101	153	* 200	192	68	119	158	0
36	39	16	28	45	35	37	30	44	40	34	37	33	32	34	30	3
16 12 8	16 17 6	6 6 4	10	16	6	10	16 11 3	6			25 9 3	23 6 4	4	7	24 6	1
1,921	1,315	1,257	2,201	1,443	1,039	924	1,255	1,208	1,102	1,288	1,566	1,781	885	1,371	983	1
350 409	294 267	276 259			237 226	214 178	226	239	218 283	208	286	234	184 216		119 311	1
781 160	465 114			499 160			370 221	331 195	289 162		306 319	394 456	129 173	181 374	108 236	1
27 194	16 159	21 177	19 212	10 197	16 125		8 140	131	14 136	8 110	9 263	13 247	176	5 217	5 204	1

^{*} Year in which disease was placed on the list of diseases to be restricted by the State Board of Health, which was established in 1873.

† Year in which active measures for restriction and prevention were undertaken.

Table 65.—CONCLUDED.—Important diseases returned,

												v	ears
Line No.	Causes of deaths, 1869-96.	1896.	1895.	1894.	1893.	1892.	1891.	1890.	1889.	1888.	1887.	1886.	1885.
37	Brain diseases	1,876	1,907	1,829	1,709	1,534	1,614	1,544	1,511	1,615	1,441	1,435	1,304
38 39	Apoplexy Brain, Congestion of	337 65	320 78	283 81	240 79	219 68	213 87	153	159	147	141	161	121
40 41	Brain, Inflammation of Epilepsy	298 59	279 57	302 49	307 66	292 62	315 42	318 54	341 40	405 65	319 54	332 49	296 50
42 43 44	Meningitis Paralysis Brain disease, etc	192 745 180	* 178 793	181 707 226	172 662 183	148 571 174	204 596 157	180 558 281	164 542 265	194 553 251	184 465 278	182 485 226	174 400 263
45	Cancer	780	757	677	644	558	534	533	492	480	453	391	403
46	Tumor	161	172	149	156	139	157	123	102	108	93	91	104
47	Childbirth	243	259	213	222	244	255	196	254	250	236	223	230
48	Convulsions	506	458	412	520	548	547	349	453	513	474	431	452
49	Diabetes	122	100	106	111	69	78	63	74	71	61	68	65
50	Dropsy	442	470	400	446	389	397	422	337	464	342	334	330
51	Fever (unspecified)	87	107	75	100	129	107	123	111	164	117	123	96
52	Fever, Malarial	101	127	91	122	146	133	146	197	200	171	168	142
53	Heart diseases	1,491	1,458	1,391	1,429	1,329	1,346	1,185	1,132	1,055	954	794	7219
54 55 56	Pericarditis Heart disease, etc "Heart failure"	1,025 389	90 943 425	88 898 405	80 996 353	97 864 368	70 901 375	70 1,115	1,071	86 969	107 847	64 730	69 730
57	Influenza	248	* 410	402	555	907	1,076	1,084	176	2	2	3	2
58	Kidney diseases	624	578	549	479	442	407	331	347	331	327	322	304
59 60	Kidneys, Inflam'tion of Kidney disease, etc	478 146	429 149	414 135	375 104	332 110	271 136	227 104	242 105	241 110	226 101	244 78	215 89
61	Liver disease	203	218	162	166	121	167	140	158	179	154	120	147
62	Lung diseases	1,889	1,987	1,690	1,566	1,765	1,702	1,786	1,578	1,889	1,449	1,302	1,194
63 64	AsthmaBronchitis	74 181	95 190	74 174	79 182	65 184	77 138	74 188	59 120	65 199	59 121	66 97	62 113
65 66	Pleurisy Pneumonia	1,386	*1,453	1,200	28 1,385	30 1,298	$^{24}_{1,248}$	27 1,224	25 1,132	1,313	25 970	20 857	16 804
67 68	Lungs, Congestion of Lung disease, etc	54 157	79 137	81 132	77 115	87 101	99 116	273	242	266	274	262	199
69	Rheumatism	167	144	151	141	149	141	120	154	154	158	145	111
70	Septicemia	198	201	154	177	167	172	153	191	157	121	125	120
71	Spine disease, etc	121	134	103	105	94	106	110	124	114	95	131	88
72	Stomach diseases	299	310	249	233	178	142	177	158	172	165	118	125
73 74	Stomach, Inflam'tion of . Stomach disease, etc	97 202	96 214	79 170	64 169	53 125	49 133	27 150	39 114	43 129	35 130	37 81	44 78
75	Syphilis	21	12	26	21	11	6	7	5	14	4	9	16
76	Unclassified	1,798	1,823	1,656	1,580	1,949	1,876	1,889	2,455	2,710	2,324	2,230	2,046

^{*} Placed on list of dangerous communicable diseases by State Board of Health in 1895. Active restrictive measures not yet taken.

us causes of deaths in Michigan, 1869-96.

1884.	1883.	1882.	1881.	1880.	1879.	1878.	1877.	1876.	1875.	1874.	1873.	1872.	1871.	1870.	1869.	Line 1
1,358	1,188	1,215	1,353	1,118	944	889	1,001	1,011	850	893	1,655	1,161	679	687	663	
132	87	89	111	123	105	95	86	107	94	63	81	70	70	54	65	
310 43	293 45	276 48	361 63	301 41	222 42	225 31	291 35	275 31	232 31	261 30	333 33	330 28	216 25	233 18	226 12	
238 397 233	229 345 189	227 357 218	332 260 226	159 279 215	104 262 209	110 242 186	138 244 207	123 233 242	166 172 155	185 171 183	812 171 225	360 154 219	24 144 200	11 122 249	13 120 227	
361	383	301	310	285	272	269	266	241	203	188	172	133	105	120	113	
85	58	68	86	76	65	56	45	41	55	34	48	31	32	23	20	
244	238	213	202	201	210	173	166	158	194	209	269	236	158	146	127	
436	344	356	337	348	275	288	298	275	258	258	306	315	238	281	256	
49	58	52	49	44	42	33	39	19	36	27	31	35	33	29	25	
324	296	317	283	272	271	256	236	236	237	245	271	234	228	270	251	
133	117	131	193	191	136	124	106	174	132	187	203	219	187	201	289	
186	153	193	241	147	125	125	141	108	116	144	201	208	153	163	121	
791	762	627	620	551	538	444	448	394	380	411	396	366	291	311	274	
70 721	73 689	64 563	101 519	68 483	84 454	76 368	53 395	54 340	68 312	71 340	69 327	56 310	49 242	43 268	22 252	
	2	1	2	3	5	3	2		6	2	12	6	2			
264	264	206	187	154	113	113	93	80	54	-63	68	-60	59	45	32	
191 73	196 68	145 61	.112 75	95 59	54 59	45 68	45 48	32 48	23 31	31 32	32 36	27 33	24 35	12 33	3 29	
154	140	145	143	125	124	141	126	121	112	121	132	135	103	110	71	
,210	1,204	1,216	1,262	1,279	1,107	859	799	994	1,137	1,223	1,043	962	700	625	621	
61 98	51 83	50 100	37 64	39 50	39 49	31 44	25 42	23 42	20 43	20 32	21 20	25 25	17 19	22 20	24 11	
18 840	20 827	16 834	19 941	26 920	20 794	16 552	14 559	19 695	14 846	15 937	18 793	20 701	12 482	11 405	9 455	
193	223	216	201	244	205	216	159	215	214	219	191	191	170	167	122	
133	143	107	123	85	85	61	76	70	74	73	72	101	51	44	49	
94	113	80	52	18	6	-8	5	5	4	2	2	1		1		
114	108	94	139	76	83	78	85	75	72	120	174	101	- 33	39	39	
120	125	106	127	89	99	85	77	76	73	73	-83	72	49	67	34	
39 81	42 83	33 73	44 83	31 58	32 67	30 55	20 57	22 54	27 46	24 49	36 47	29 43	24 25	23 44	15 19	
14	9	6	3	13	10	2	7	6	7	9	6	3	2	10	2	
2,058	1,553	1,380	1,448	1,199	1,075	1,035	942	998	844	944	1,023	985	809	686	647	

Table 66.—Important diseases and groups of diseases registered in Michigan during 1870-94, showing death rates per 100,000 population, and

						-		paratio	
er.				Rates	s per 100,00	и рорша	ttion.		
Line number.	Causes of deaths, 1870–96.	Year, 1896.	Year, 1895.	Year, 1894.	Five years, 1890 to 1894.	Five years, 1885 to . 1889.	Five years, 1880 to 1884.	Five years, 1875 to 1879.	Five years, 1870 to 1874.
1	TOTAL DEATHS	949.4	998.7	935.0	1,000.0	976.8	993 8	870.6	963.0
2	SPECIFIED DISEASES	756.7	810.5	757.3	813.6	812.8	814.9	682.2	788.6
3	Danyerous Communicable Diseases	183.9	201.5	195.7	229.8	252.3	311.8	261.9	286.9
4	(Consumption	90.4	105.2	98.4	98.8	108.5	112.0	108.5	112.1
5	Other tubercular diseases	8.2	11.2	10.1	9.3	7.0	9.0	8.5	11.0
6	Marasmus	3.3	5.5	4.1	4.2	1.9	1.9	.5	.3-
7	Meningitis, Tuber	1.4	1.3	1.8	1.7	2.3	2.9	3.8	5.6
8	Scrofula	.7	.9	1.0	1.0	1.3	1.8	2.2	3.3
9	Tabes mesenterica	2.0	2.6	2.5	1.6	1.2	1.8	1.3	1.3
10	Other forms of tuber-	.9	8	.6	.8	.5	.6	.7	.6
11	Croup	9.1	6.0	6.1	11.3	16.3	16.6	12.0	11.4
12	Croup, Membranous	2.2	2.1	2.0	2.4	• 4.1	3.0	1.8	.6
13	Diphtheria	28.0	26.1	28.6	45.6	47 4	81.3	47.2	13.9-
14	Erysipelas	2.7	3.0	1.9	2.5	3.4	4.7	5.8	9.1
15	Fever, Puerperal	2.0	1.4	1.5	1.7	1.9	2.3	2.1	3.4
16	Fever, Scarlet	4.6	5.1	7.3	14.6	14.6	26.9	27.9	49.8
17	Fever, Typhoid	23 3	29.0	23.9	27.7	29.7	32.3	27.3	45.1
18	Fever, Typho-Malarial	.6	1.0	1.0	1.1	1.6	1.5	.5	.2
19	Fever, Typhus	.1	.3	.1	.3	.2	.6	1.0	1.2:
21	Measles	5.2	2.0	3.8	6.8	9.8	10.7	6.7	9.5
23	Smallpox	.6	3.1	3.8	.9	.2	2.2	2.9	7.9
24	Chickenpox	.0	.1	.2	.2	.1	.1	.1	.1
25	Whooping cough	6.8	6.1	7.0	6.6	7.5	8.5	9.5	11.8
26	Bladder diseases	3.6	2.2	1.9	1.8	2.0	1.9	2.5	2.7
27 28 29	Calculus Cystitis	.9 1.8 .9	.5 1.1 .7	.6 1.1 .2	.5 .9 .4	.7 .9 .4	.9 .7 .3	1.5 .6 .3	1.8 .6. .3
30	Bowel diseases	77.9	96.2	91.9	87.4	87.8	93.2	74.5	109.4
31 32	Bowels, Inflammation of Diarrhea	14.9 9.2	14.9 14.2	17.7 10.4	16.9 13.8	17.5 19.0	17.5 20.0	15.3 17.2	17.5 29.0
38 34	Cholera infantum Dysentery	28.1 3.3	42.6 4.4	39.7 4.5	34.3 4.3	81.7 7.7	34.7 9.2	20.7 11.7	20.5- 25.8
35 36	Peritonitis	4.6 17.8	5.5 14.7	4.6 15.0	4 5 13.5	1.9 10.0	1.1 10.8	8.8	.6 16.1

NOTE.—The line numbers in this table correspond to the same diseases in Tables 66-68. A few diseases, c. g., German measles, which was not separately compiled until 1892, do not appear, being included under the titles beneath which they were formerly compiled.

the year 1896, compared with 1894-95, and with five successive quinquennial periods, proportional deaths per 1,000 deaths from specified diseases.

Year, 1896.	Year, 1895.	Year, 1894.	Five years, 1890 to 1894.	Five years, 1885 to 1889.	Five years, 1880 to 1884.	Five years, 1875 to 1879.	Five years, 1870 to 1874.	T inc number
1,254.7	1,232.3	1,234.7	1,229.1	1,201.8	1,219.5	1,276.1	1,221.2	
1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0	İ
243.0	248.6	258.4	282.4	310.4	342.6	383.8	363.8	-
119.5	129.7	130.0	121.4	133.5	137.5	159.0	142.2	
10.9	13.8	13,4	11.4	8.7	11.1	12.5	14.0	l
4.8	6.8	5.4	5.2	2.3	2.4	.7	.4	
1.8	1.6	2.4	2.0	2.8	3.5	5.6	7.2	
.9	1.1	1.4	1.2	1.6	2.8	3.1	4.1	
2.6	3.2	3.4	2.0	1.4	2.2	1.9	1.6	
1.2	1.0	.8	1.0	.6	.8	1.1	.7	ĺ
12.0	7.4	8.0	13.9	20.1	20.3	17.6	14.5	ĺ
2.9	2.5	2.6	2.9	5 0	3.7	2.7	.8	1
37.0	32.2	37.8	56.1	58.3	99.8	69,2	17.6	İ
8.5	3.7	2.5	3.1	4.2	5.8	8 5	11.5	ł
2.6	1.7	2.0	2.0	2.3	2.8	3.1	4.3	
6.0	6.3	9.6	18.0	18.0	83.0	41.0	63.1	ĺ
30.8	35.7	31.6	34.0	36.5	39.6	40.1	57.2	l
.8	1.2	1.3	1.3	2.0	1.8	.7	.2	Ì
.1	.3	.1	.3	.2	.8	1.5	1.5	
6.9	2.5	5.1	8.4	12.1	13.1	9.8	12.0	
.7	3.8	5.0	1.1	.2	2.7	4 2	10.0	l
.1	.1	.2	.2	.1	.1	.2	.1	
9.0	7.6	9.3	8.1	9.3	10.5	13.9	14.9	1
4.7	2.8	2.5	2.3	2.5	2.3	3.7	3.4	
1.2 2.3 1.2	1.3 .9	1.5 .3	.6 1.1 .5	1.1 .5	1.1 .8 .4	2.8 .9 .4	2.8 .7 .4	
102.9	118.7	121.4	107.4	10₩.0	114.4	109.1	138.8	
19.6 12.1	18.4 17.5	23.3 13.8	20.8 17.0	21.6 23.4	21.5 24.5	22 4 25.2	22.2 36.8	
37.2 4.3	52.6 5.4	52.5 5.9	42.2 5.3	39.0 9.4	42.6 11.2	30.3 17.2	26.0 32.7	
6.1 23.6	6.8	6.0	5.6	2.3	1.3	1.1	.8 20.4	

^{*} Includes German measles.

Table 66.—CONCLUDED.—Important diseases and groups of diseases

<u>.</u>				Rates	per 100,00	0 popula	tion.		-
Line humber.	Causes of deaths, 1870-96.	Year, 1896.	Year, 1895.	Year, 1894.	Five years, 1890 to 1894.	Five years, 1885 to 1889.	Five years, 1880 to 1884.	Five years, 1875 to 1879.	Five years, 1870 to 1874.
37	Brain diseases	81.0	83.7	81.6	75.9	74.0	71.3	63.2	80.6
-38 40	ApoplexyBrain, Inflammation of	14.6 12.9	14.0 12.2	12.6 13.5	10.2 14.2	7.4 17.2	6.2 17.6	6.5 16.8	5.4 21.8
41 42	Epilepsy	2.5 8.3	2.5 7.8	2.2 8.1	2.5 8.2	2.6 9.1	2.8 13.6	2.3 8.6	2.1 22.1
43 44	ParalysisBrain disease, etc.*	32.2 10.6	34.8 12.3	81.5 13.7	28.6 12.3	24.8 18.0	18.8 12.4	15.5 13.5	12.1 17.1
45	(Cancer	33.7	33.2	30.2	27.2	22.5	18.8	16.8	11.4
-46	Tumor.	7.0	7.5	6.6	6.7	5.1	4.8	3.5	2.7
47	Childbirth	10.5	11.4	9.5	10.4	12.1	12.6	12.1	16.2
-48	Convulsions	21.9	20.1	18.4	21.9	23.6	20.9	18.8	22.2
49	Diabetes	5.3	4.4	4.7	3.9	3.4	2.9	2.3	2.5
-50	Dropsy	19.1	20.6	17.8	19.0	18.3	17.1	16.6	19.9
:51	Fever (unspecified)	3.8	4.7	3.3	4.9	6.2	8.8	9.0	15.8
52	Fever, Malarial	4.4	5.6	4.1	5.9	8.9	10.5	8.3	13.8
53	Heart diseases	64.4	64.0	62.1	61.6	48.0	38'.4	29.7	28.2
54 -55	Pericarditis	3.3 61.1	8.9 60.0	3.9 58.1	3.7 57.9	3.9 44.0	4.3 34.1	4.5 25.2	4.6 23.6
-57	Influenza	10.7	18.0	17.9	37.1	1.9	.1	.2	.3
58	Kidney diseases	26.9	25.4	24.5	20.4	16.7	12.3	6.1	4.7
59 60	Kidneys, Inflammation of Kidney disease, etc	20.6 6.3	18.8 6.5	18.4 6.0	14.9 5.4	11.9 4.9	8.5 3.8	2.7 3.4	2.0 2.7
·61	Liver disease, etc	8.8	9.6	7.2	7.0	7.6	8.1	8.4	9.5
62	Lung diseases	81.6	87.2	75.4	81.3	75.1	70.7	65.9	72.4
63 64	Asthma Bronchitis	3.2 7.8	4.2 8.3	3.3 7.8	3.4 8.0	3.1 6.6	2.8 4.5	1.9 3.0	1.7 1.8
66 66 68	Pleurisy Pneumonia Lung disease, etc.‡	1.6 59.9 9.1	1.4 63.8 9.5	1.3 53.5 9.5	1.3 58.6 10.0	1.3 51.4 12.6	1.1 50.0 12.3	1.1 46.4 13.6	1.2 52.7 14.9
69	Rheumatism	7.2	6.3	6.7	6.5	7.3	6.4	4.9	5.4
70	Septicemia	8.6	8.8	6.9	7.6	7.3	4.1	.4	.1
71	Spine disease, etc	5.2	5.9	4.6	4.8	5.6	6.1	5.3	7.4
72	Stomach diseases	12.9	13.6	11.1	9.4	7.4	6.5	5.5	5.5
73 74	Stomach, Inflammation of Stomach disease, etc	4.2 8.7	4.2 9.4	3.5 7.6	2.5 6.9	2.0 5.4	2.2 4.4	1.8 3.8	2.1 3.3
75	Syphilis	.9	.5	1.2	.6	.5	.5	.4	.5
76	Unclassified	77.7	80.0	73.9	82.6	119.2	87.5	65.8	70.6

^{*} Includes congestion of brain. † Includes "heart failure." ‡ Includes congestion of lungs.

DEATH RATES FROM SPECIFIED CAUSES, 1870-96

registered in Michigan during the year 1896, compared with 1870-95.

	1	Rates per 1,00	deaths from	specified d	iseases.			1
Year, 1896.	Year. 1895.	Year, 1894.	Five years, 1890 to 1894.	Five years, 1885 to 1889.	Five years, 1880 to 1884.	Five years, 1875 to 1879.	Five years, 1870 to 1874.	T 1-1
107.1	103,3	107.7	93.3	91.1	87.5	92.7	10 3.2	
19.2 17.0	17.3 15.1	16.7 17.8	12.6 17.4	9.1 21.1	7.6 21.7	9.6 24.6	6.8 27.7	
3.4 11.0	3.1 9.6	2.8 10.7	3.1 10.0	3.2 11.2	3.4 16.7	3.4 12.6	2.7 28.0	
42.5 14.0	42.9 15.2	41.6 18.1	35.1 15.1	30.5 16.0	23.1 15.2	22 8 19.7	15.3 21.7	
44.5	41.0	39.9	33.4	27.7	23.1	24.7	14.5	
9.2	9.3	8.8	8.2	6,2	5.3	5.1	3.4	
13.9	14.0	12.5	12.8	14.9	15.5	17.8	20.5	l
28.9	24.8	24.3	26.9	29.0	25.6	27.5	28.2	
.7.0	5.4	6:2	4.8	4.2	3.5	3.4	3.1	l
25.2	25.5	23.6	23 3	22.5	21.0	24.4	25.2	
5.0	5.8	4.4	6.1	7.6	10.8	13.2	20.0	
5.8	6.9	5.4	7.3	11.9	12.9	12.1	17.5	
. 85.1	79.0	81.9	75.7	59.0	47.1	43.5	35.8	
4.4 80.7	4.9 74.1	5.2 76.8	4.6 71.2	4.8 54.2	5.3 41.8	6.6 36.9	5.8 29.9	ļ
14.2	22.2	23.7	45.6	2.3	.1	.3	.4	
35.6	31.3	32.3	25.1	20.6	15.1	9.0	5.9	
27.3 8.3	23.2 8.1	24.4 8.0	18.4 6.7	14.6 6.0	10.4 4.7	3.9 5.0	2.5 3.4	
11.6	11.8	9.5	8.6	9.4	9.9	12.3	12.1	l
107.8	107.6	99.6	99.9	92.4	86.8	96.6	91.8	
4.2 .10.3	5.1 10.3	4.4 10,3	4.2 9.8	3.9 8.1	3.4 5.6	2.8 4.3	$\frac{2.1}{2.3}$	
2.1 79.1 12.0	1.8 78.7 11.7	1.7 70 7 12.5	1.6 72.1 12.2	1.6 63.3 15.5	1.4 61.3 15.1	1.7 68.0 19.8	1.5 66.9 18.9	
9.5	7.8	8.9	7.9	9.0	7.9	7.2	6.8	
.11.3	10.9	9.1	9.4	9.0	5.0	.6	.1	
46.9	7.3	6.1	5.9	6.9	7.5	7.8	9.4	
17.1	16.8	14.7	11.6	9.1	7.9	8.1	6.9	
5.5 11.5	5.2 11.6	4.7 10.0	3.1 8.4	2.5 6.6	2.7 5.3	2.6 5.5	$\frac{2.7}{4.2}$	
1.2	.6	1.5	.8	.6	6	.6	.6	
102.6	98.7	97.6	101.5	146.7	107.4	96.5	89.5	

Table 67.—Death rates per 100,000 population, from certain important dangerous communicable diseases and from cancer, pneumonia and influenza for each of the years 1869-96. (See Diagram II, opposite.)

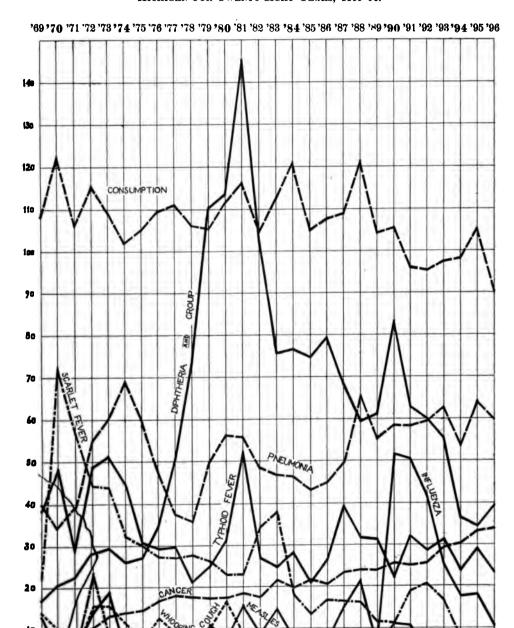
Years.	Danger- ous com- muni- cable dis- eases.	Con- snmp- tion.	Diph- theria and croup.	Scarlet fever.	Typhoid fever.	Measles	Small- pox.	Whoop- ing cough.	Can- cer.	Pneu- monia.	Influ- enza.
1869	231.9	108.1	17.0	22 1	38.3	12.9	3.7	13.9	9.9	39.9	
1870* .	300.7	122.5	20.9	72.0	48.5	4.7	0.8	10.1	10.1	34.2	
1871	250.7	108 0	22.5	56.6	29 0	5.5	6.0	5.5	8.5	39.2	.2
1872	318.9	115.1	28.2	44.3	48.7	14.1	23.7	15.1	10.4	55.0	.5
1873	305.1	109.6	29.6	43.9	51.3	18.6	7.0	15.6	13 0	60.1	.9
1874	243.3	102.0	26.2	32.2	44.8	3.4	1.3	11.2	13.8	68.6	.1
1875	232.0	104.9	26.9	30.0	30.7	9.5	1.8	7.2	14.4	60.0	.4
1876	245.1	109.2	- 34.7	27.4	29.3	8.1	5.2	12.4	16.5	47.7	
1877	255.3	110.9	50.6	26.9	29.7	4.1	6.8	8.7	17.7	37.2	.1
1878	253.4	106.1	72.8	27.7	21.3	1.0	0.4	8.5	17.4	35.7	.2
1879	305.2	105.6	110.5	26.3	24.9	10.5	0.4	10.2	17.1	49.9	.3
1880* .	321.5	111.7	113.9	22.7	31.3	7.6	0.2	16.1	17.4	56.2	.2
1881	388.2	116.1	145.2	22.8	52.5	15.2	4.9	8.4	18.4	55.9	.1
1882	305.5	104.4	102.1	34.3	26.8	8.7	5.8	5.0	17.4	48.3	.1
1883	286 4	112.3	75.7	37.9	24.7	14.5	0.3	5.2	21.6	46.6	.1
1884	277.7	120.8	76.4	17.9	28.2	7.9	0.2	8.8	19.9	46.2	
1885	237.5	105.3	74.6	13.1	20.7	2.0	0.2	7.4	21.6	43.1	.1
1886	260 4	107.3	79.4	16.7	26.1	6.8	0.3	9.7	20.5	44.8	.2
1887	268.3	108.7	68.2	16.3	39.3	14.6		5.6	23.2	49.6	.1
1888	273.8	121.0	£9.8	16.1	31.9	20.6	0.2	8.7	24.0	65.6	.1
1889	232.5	104.3	61.1	11.7	31.1	5.1	0.1	6.8	24.0	55.3	8.6
1890* .	250.9	105.4	83.0	10.6	22.2	10.9	0.3	3.6	25.5	58.5	51.8
1891	242.1	96.3	63.0	18.7	32.0	10.5	0.1	7.4	25.0	58.3	50.5.
1892	230.1	95.2	60.0	20.2	28.6	3.3	0.1	6.7	25.5	59.4	41.8
1893	229.2	97.7	55.2	16.3	31.3	5.8	0.1	7.8	29.2	62.8	25.2
1894* .	195.7	98.4	36.7	7.3	23.9	3.8	3.8	7.0	30.2	53.5	17.9
1895	201.5	105.2	34.2	5.1	29.0	2.0	3.1	6.1	33.2	63.8	18.0
1896	183.9	90.4	39.3	4.6	23.3	5.2	.6	6.8	33.7	59.9	10.7

^{*} Census years.

Certain diseases are of so much importance that five-year averages do not seem to be sufficient for their satisfactory study. We wish to know not only their general tendency, but also just how each one has fluctuated from year to year. For this reason, Table 67 gives the annual rates for certain important diseases, and the figures therein contained are also represented graphically in Diagram II, facing it.

Tables 63 to 67, inclusive, form the chief basis for the remarks relating to diseases returned as causes of death in Michigan during the year 1896. This discussion begins on page 158, reference being made to the data contained in these tables by means of the reference line numbers. Before beginning the subject of individual causes of death, certain tables showing the geographical distribution of diseases during the year 1896 will be presented.

DIAGRAM II.—Comparative Mortality from Certain Important Diseases in Michigan for Twenty-eight Years, 1869-96.



NOTE See table 67 on opposite page. Scale represents death rates per 100,000 population. Census years in boldface type.

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GEOGRAPHICAL DISTRIBUTION OF DISEASES IN MICHIGAN, 1896.

The following list shows the counties contained in each geographical division of the State, as subdivided for the purpose of more conveniently studying the distribution of causes of deaths. This arrangement has been in use in these Reports from an early date and much valuable information has been accumulated in connection with it in regard to the distribution of diseases. Maps showing the distribution of the mortality from typhoid fever, consumption and diphtheria in Michigan, were given in recent Reports of this series.

- I. UPPER PENINSULAR.—Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron Keweenaw, Luce, Mackinac, Marquette. Menominee, Ontonagon, Schoolcraft.
- II. NORTHWESTERN.—Benzie, Grand Traverse, Leelanau, Manistee, Manitou, Wexford.
- III. NORTHERN.—Antrim, Charlevoix, Cheboygan, Crawford, Emmet, Kalkaska, Otsego.
- IV. NORTHEASTERN.—Alcona, Alpena, Iosco, Montmorency, Ogemaw, Oscoda, Presque Isle.
- V. WESTERN.-Kent, Lake, Mason, Muskegon, Newaygo, Oceana, Ottawa.
- VI. NORTH CENTRAL.—Clare, Gladwin, Isabella, Mecosta, Midland, Missaukee, Osceola, Roscommon.
- VII. EASTERN.-Arenac, Bay, Huron, Lapeer, Saginaw, Sanillac, St. Clair, Tuscola.
- VIII. CENTRAL.—Barry, Clinton, Eaton, Genesee, Gratiot, Ingham, Ionia, Livingston, Montcalm, Shiawassee.
 - IX. SOUTHWESTERN.—Allegan, Berrien, Cass, Van Buren.
 - X. SOUTH CENTRAL—Branch, Calhoun, Hillsdale, Jackson, Kalamazoo, Lenawee, St. Joseph, Washtenaw.
 - XI. SOUTHEASTERN .-- Macomb, Monroe, Oakland, Wayne.

Table 68.—Comparison, by geographical dtvisions, of the number and percentage of deaths returned in 1896 from "old age," and of persons aged over 70 years and under 5 years. (Stillbirths included.)

		"Old	age."	Aged 70	and over.	Aged u	ınder 5.
State and geographical divisions.	Deaths at all ages, 1896.	Number of deaths, 1896.	Per cent of deaths at all ages	of	Per cent of deaths at all ages.	Number of deaths, 1896.	Per cent of deaths at all ages.
State	21,983	810	3.7	3,717	16.9	7,289	33.2
Upper Peninsular	2,537	40	1.6	127	5.0	1,315	51.8
Northwestern	736	12	1.6	68	9.2	319	43.3
Northern	492	13	2.6	83	16.9	191	38.8
Northeastern	389	18	4.6	31	8.0	180	46.3
Western	2,302	84	3.6	374	16.2	747	32.5
North-Central	656	15	2.3	76	11.6	232	35.4
Eastern	2,963	121	4.1	432	14.6	980	33.1
Central	2,670	139	5.2	671	25.1	560	21.0
Southwestern	1,257	59	4.7	301	23.9	302	24.0
South-Central	2,947	160	5.4	873	29.6	544	18.5
Southeastern	5,034	149	8.0	681	13.5	1,919	38.1

Table 69.—Comparison, by yeographical divisions, of the number and percentage of deaths in 1896 from certain specified causes: Consumption, pneumonia, influenza, diphtheria, croup, scarlet fever, typhoid fever, diarrheal diseases.

	-	Consumption.	aption.	Pneumohia	nohia.	Influenza.	nza.	Diphtheria.	neria.	Croup.*		Scarlet	Scarlet fever. Typhoid fever	Typhoid	1 fever.	Diarrheal diseases.†	heal ses.†
State and Keographical divisions.	from all causes, 1896.	Num- ber of deaths, 1896.	Per cent of deaths from all causes.	Num- ber of deaths, 1896.	Per cent of deaths from all	Number of deaths, 1896.	Per cent of deaths from all causes.	Num- ber of deaths, 1896.	Per cent of deaths from all causes.	Num- ber of leaths, 1896.	Per cent of deaths from all causes.	Num- ber of deaths, 1896.	Per cent of deaths from all causes.	Num- ber of deaths, 1896.	Per cent of deaths from all causes.	Num- ber of deaths, 1896.	Per cent of deaths from all causes.
State	21,983	2,098	9.5	1,386	6.3	548	=	649	3.0	262	1.2	106	ı.	8 2	23.	88	4.3
Upper Peninsular	2.537	205	90.1	190	7.5	15	8.	105	1.4	8	2	13	rċ.	8	96	308	8.1
Northwestern	738	Ęį.	8.6	8	8.2	•	œ	12	6 ş	12	5.3	-	-:	88	88	æ	8.8
Northern	48%	37	7.5	8	5.3	•	1.2	· t -	1.4	ro	1.0		i	21	2.4	13	3.0
Northeastern	38	ន	5.9	71	3.6	_	wi	4	1.0	ro	1.3	-	æ	4	•10	15	8.0
Western	2,302	350	10.9	138	6.0	13	9.	72	5.3	8	1.1	8 2	œ	. 47	2.0	83	1.
North-Central	656	55	11.1	34	5.2	œ	1.2	ຄ	3.0	ıc	œ	က	rċ	14	2.1	. 1	6.9
Eastern	2,963	288	9.5	188	6.3	82	1.0	88	3.1	엃	1.1	ଛ	1.0	9 8	6.	8	4.0
Central	2.670	356	9.6	187	7.0	18	<u></u>	22	1.0	12	7.	t÷	wi	56	89 89	99	+ 0
Southwestern	1,257	148	11.8	7.9	6.3	23	1.8	22	2.1	13	1.0			53	2.3	4	89 70
South-Central	2,947	332	11.4	163	5.5	33	1.2	19	2.1	3	œ.	4	Τ.	8	2.1	\$	3.2
Southeastern	5.034	412	85	297	.c.	22	1:1	335	4,	109	ei ei	88	æ.	104	2.1	185	2.00
		-		-	-	-	-		-	-	-	-	-	-	-		

* Includes 51 cases of membranous croup, specified as such. † Includes diarrhea, dysentery, cholera infantum.

Table 70.—Deaths and death rates per 100,000 population, by geographical divisions, forcertain important diseases and groups of diseases in Michigan during the year 1896.

State	Esti- mated popula- tion, 1896.		All	l ca	uses.	Dangerous communi- cable diseases.		Consump- tion		-	Diphtheria and croup.		Scarlet fever.		Typhoid fever.	
and geographical divisions.			Deaths,	1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.	Deaths,	Rate per	100,000.	Dearns, 1896.	100,000.	Deaths, 1896.	Rate per 100,000.
State	2,3	2,315,517		983	949.4	4,258	183.9	2.093	90.4	4 9	11 3	9.3	106	4.6	539	23.3
Upper Peninsular .	2	19,55	6 2,	537	1155.5	511	232.7	205	93.	4 1	35 6	1.5	13	5.9	65	29.0
Northwestern	81,122		2	736	907.3	160	197.2	72	88.	8	34 4	1.9	1	1 2	-28	34.
Northern		66,05	8	492	741.8	78	118.1	37	56.	0	12 1	3.2			12	18.5
Northeastern	51,964 265,402		4	389	748.6 867.4	51 446	98.1 168.0	23 250	44.3 94.2	3	9 1	7.3	1	1.9	4 47	7.7 17.7
Western			2 2,	302						2	79 2	8.6	18	6.8		
North-central		98,71	7	656	664.5	158	160.1	73	73.9	P	25 2	5 3	3	3.0	14	14.5
Eastern	3	41.19	ő 2.	963	868.4	594	174.1	282	82.3	7 1	24 36	3.3	30	8 8	86	25.2
Central	3	18.10	2 2,	670	839.4	446	140.2	256	80:	5	39 15	2.3	7	2.2	87	27.8
Southwestern	1	39,72	1 1,	257	899.7	248	177.5	148	105.9	P	40 28	3.6	;		29	20.8
South-central	3	13,88	5 2,	947	938.9	529	168.5	335	106.	7	70 25	2.3	4	1.3	63	20.1
Southeastern	4	19,79	5,	034	1199.2	1,037	247.0	412	98.	1 3	44 81	1.9	29	6.9	104	24.8
State and geographical divisions.	Meas- les.		Whooping cough.		Bowel diseases.		Brain diseases.		Cancer and tumor.		Heart dis- eases.*		Lung diseases.+		Violence.	
	Deaths, 1896.	Kate per 100,000.	Deaths, 1896.	Rate per 100.000	Deaths, 1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.	Deaths, 1896.	Rate per 100,000.
State	121	5,2	158	6.8	1,803	77.9	1,876	81.0	941	40.6	1,102	47.6	1,889	81.6	1,289	55,7
Upper Peninsular.	31	14.1	20	9,	311	141,6	121	55,1	62	28.2	78	85.5	292	133.0	207	94.3
Northwestern	13	16.0	4	4.5	61	75,2	46	56.7	22	27.1	33	40 7	67	82.6	34	41.9
Northern			11	16.	27	40.9	41	62.1	14	21.2	25	37.8	42	63.6	37	56.0
Northeastern	4	7.7	5	9,6	34	65.4	22	42,3	8	15.4	10	19.2	18	34.6	33	63.5
Western	5	1.9	16	6.0	171	64.4	226	85,2	110	41.4	141	53,1	207	78.0	122	46.0
North-central	11	11.1	15	15.5	65	65,8	42	42.5	25	25.3	23	23.3	42	42.5	33	33.4
Eastern	27	7.9	18	5.3	241	70.6	212	62,1	144	42.2	143	41.6	248	72.7	179	52.7
Central	7	2.2	19	6,0	210	66,0	280	88.0	129	40.6	186	58.5	248	78.0	122	38.4
Southwestern	2	1.4	10	7.5	77	55.1	127	90,9	61	43,7	73	52.2	103	73,7	75	53.7
South-central	4	1.3	13	4.1	196	62,4	390	124.2	162	51.6	203	64.7	200	63.7	132	42.1
Southeastern	17	4.0	27	6.4	410	97.7	369	87.9	204	48,6	188	41.8	422	100.5	315	75.0

^{*} Not including "heart failure." † Not including consumption.

DISCUSSION OF DISEASES RETURNED AS CAUSES OF DEATHS IN MICHIGAN, 1896.

The following remarks on this subject are based chiefly on Tables 63 to 70, to which reference may be conveniently made by means of the line numbers prefixed to each cause of death in the following text. Table 63 gives the distribution of deaths from each cause by sex, months of the year, and periods of age of the decedents; Table 64 presents the same list of causes of deaths by counties; Table 65 shows the number of deaths registered from each disease for previous years of registration, while Table 66 reduces the evidence presented in Table 65 to a more compact and comparable form by means of death rates and five-year averages. Table 67 traces the fluctuations of individual diseases from year to year (see Diagram II), and Tables 68-70 illustrate the geographical distribution of fatal diseases through the State.

The classification of Tables 63-66, is the provisional one employed in these Reports since 1892. It was designed merely for use until a satisfactory nomenclature shall be authoritatively introduced and adopted by American registrars, and as this very desirable end has been attained by the indorsement of the Bertillon classification of causes of death by the American Public Health Association, this provisional system will now be discarded for the latter. It seemed advisable to begin the use of the Bertillon system with the first returns under the new registration law, leaving the provisional classification to be used in terminating the reports under the old law. The two series of reports will not be directly comparable, since registration is much more accurate under the new law.

Without laying special stress on the particular from which a classification of causes of death shall assume, the general adoption of a uniform arrangement, even were it merely alphabetical, will mark the beginning of that deeper identity which is absolutely essential to the comparability of international statistics. Not only must the several titles in a nosological list correspond in their outward form, but the diseases compiled under each must be the same. Dissimilarities of inclusion of terms are the most objectionable feature of the present lack of harmony, and the consciousness that the user of mortality statistics can know exactly what causes of death are compiled under a given term will be one of the most satisfactory achievements of the movement for uniformity. Of course, it is not intended to assume that uniformity of nomenclature is the only point on which agreement is desirable. But this very difficult step having been achieved, an agreement in regard to the statement of age periods, etc., ought to readily follow.

DEATHS FROM ALL CAUSES AND FROM SPECIFIED DISEASES, 1896.

(1) TOTAL DEATHS		
(2) SPECIFIED DISEASES		in Michigan for the year 1896 amounted
Violence	1,289	in Michigan for the year 1000 amounted
Stillbirths		to 21,983, of which number 17,521 were
Premature births		ascribed to various diseases. This latter
Unknown causes of death	1,820	number is accordingly taken as the basis
		of reference to which percentage com-

parisons of the deaths from any particular cause should be referred, as stated in Table 66. Deaths from specified diseases are divided for present purposes of study into two groups: (1) Dangerous communicable diseases, and (2) Diseases not so classed at present. The former group is of the greater practical sanitary interest, and will first be given attention.

DANGEROUS COMMUNICABLE DISEASES.

(3) Dangerous Communicable Diseases (4) Consumption (5) Other tubercular diseases (6) Marasmus (7) Tubercular meningitis (8) Scrofula (9) Tabes mesenterica (10) Other forms of tuberculosis (11) Croup (12) Membranous croup (13) Diphtheria (14) Erysipelas (15) Puerperal fever (16) Scarlet fever (17) Typhoid fever (18) Typho-malarial fever (19) Typhus fever (20) Glanders (21) Measles (22) German measles (23) Smallpox (24) Chickenpox (25) Whooping cough	4,258 2,093 191 76 32 16 46 21 211 51 649 62 46 106 539 12 121 13 13 158	The total number of deaths from dangerous communicable diseases was somewhat less in 1896 than in the preceding year, the ratio to deaths from all causes having declined from 24.9 to 24.3 per cent. The death rate for the year, 183.9 per 100,000 living population, was lower than that for any previous year of registration, as shown by Table 67. While all of the diseases belonging to this group showed low rates of mortality, the determining reason for the decline was the unusually low death rate from consumption. The variations in the individual members of this group may be examined in Diagram II, facing page 154, and are referred to in the following descriptive text under the head of each disease. The diseases in this group have been under sanitary supervision in Michigan for different periods of time, as indicated in Table 65. The
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State Board of Health was established in 1873, and began its first warfare upon smallpox, cholera,* scarlet fever, typhoid fever, measles and whooping cough in the same year. Diphtheria was just beginning its devastating course in the State, and was not at the time recognized as of much importance. Physicians made it a point of honor to report only the distinctly marked cases, with formation of pseudomembranes, as such, and the infectious character of the disease was then a subject of considerable doubt. Practical experience of the disease, which rapidly increased in prevalence during the immediately following years, soon caused it to be included in the list of diseases dangerous to the public health (1875), and the treatment of cases of "membraneous croup" as identical for all practical sanitary purposes with diphtheria is a recent step (1889), due chiefly to the teachings of bacteriology. Consumption has been added to the list of restricted diseases still more recently (1893), and with it is included the miscellaneous group of affections compiled, with more or less certainty, as caused by the tubercle bacillus.

DEATHS IN MICHIGAN FROM TUBERCULOSIS.

(4) Consumption	16 46	Consumption caused 303 fewer deaths in Michigan during the year 1896 than during the previous year, according to the reports made to this Department. The decline in the total attributed to tubercular diseases was somewhat greater,
Total deaths from tuberculosis.	—,	there being 366 fewer deaths from this class of causes.

As stated in the last report, "the course of consumption in Michigan has been very regular, as seen in Table 67 and Diagram II, representing the death rates given therein. The greatest amount of fluctuation in any one direction has been the diminished mortality reported for the last few years, 1890-94, but this decrease, it is believed, is rather apparent than real, being due to the prevalence of epidemic influenza and the great tendency to report deaths of consumptives, whose deaths

may, indeed, have been hastened by the epidemic, to the immediate cause rather than to the disease that had weakened the vital resistance and thus prepared the way for the fatal result." While this explanation is undoubtedly true for a portion of the reduction in mortality from consumption, and especially during the first years of the present decade, influenza has now ceased to be as important a return of cause of death as at that time, and an additional cause must be sought to explain the very low mortality from consumption at the present time. Whether consumption has benefited by the unusually favorable climatic conditions, evidenced by extremely low death rates recorded all over the country from all classes of disease, or whether the special restrictive work of the State Board of Health in this direction has already borne good fruit in the shape of the marked diminution of mortality, can be better determined by a little longer observation.

Besides the deaths returned from consumption, which term is understood to apply exclusively to pulmonary phthisis, many deaths occur from other forms of tuberculosis, or, rather, tuberculosis of other organs of the body. The deaths returned from consumption of the lungs would probably require to be increased at least ten per cent to represent the total deaths due to the tubercle bacillus. Indeed, this is a very conservative estimate, since it is probable that many cases of intestinal tuberculosis in infants escape recognition. On the other hand it is not certain that the deaths compiled from "marasmus" and "tabes mesenterica" are really tubercular in character. Thus, nearly all the returns of marasmus come from a certain hospital in Detroit, and imply, in all probability, merely a wasting disease of any nature, perhaps consequent on cholera infantum or some other intestinal disorder. Taken altogether, this group may stand for some important causes of death due to the bacillus tuberculosis, that we do not have accurately returned at present. Many deaths from "unknown" causes, "weakness," "malnutrition," etc., should properly be reported under this head.

DIPHTHERIA AND CROUP.

<i>D11 111111</i>		11112 0110011
(12) Membranous croup	211 51 649	For practical sanitary purposes diph- theria and croup are identical, and are so- treated by sanitary (and many registra-
Total deaths from diphtheria and		tion) authorities at the present day. In
croup	911	this Report the deaths from diphtheria,
membranous croup and croup (unspeci	ified) are distinguished in the tables as in pre-
vious years, but the aggregate numbe	r of	deaths from the three classes of returns.
can be readily employed instead of the	e de	aths reported directly as diphtheria, if it
seem preferable to do so. Some incres	ase i	s shown for the year in deaths from diph-
theria and croup as compared with the	e pr	eceding one, diphtheria, croup and mem-
branous croup sharing alike in the adv	vance	e.

ERYSIPELAS AND PUERPERAL FEVER.

(14) Erysipelas	62		velv
(15) Puerperal fever	46	no change from preceding years.	It is
		deaths compiled under childbirth (47)	
really caused by septic infection duri	ng t	the puerperal period, and that septice	mia
(70) should also contribute a certain n	umb	er to this quota	

SCARLET FEVER.

ENTERIC FEVER.

(17) Typhoid fever	2	typhoid fever occurred as compared with the preceding year. The deaths from
fever, at least for sanitary purposes. tigated, and if found to be true typ taken. But in these returns, typhus	Of on the other of	could undoubtedly be considered as enterior course, the latter should be specially investever, the necessary precautions should be a rule, merely a synonym for typhoid, and the control of typhoid and malarial fevers. The

GLANDERS.

MEASLES AND GERMAN MEASLES.

SMALLPOX.

During the year ending December 31, 1895, there were reported to the Secretary of the State Board of Health 23 outbreaks of smallpox in 21 localities in Michigan, which resulted in 187 cases with 47 deaths. For the same year (1895) there were reported to the Secretary of State 71 deaths from smallpox, or 24 more than were reported to this office.

Smallpox cases come under the direct supervision of the health officer, and reports of cases of and deaths from this disease are made to the Secretary of this Board with greater accuracy than for any other disease. This led the Secretary of the State Board of Health to believe that there was some error in the number of deaths from smallpox reported to the Secretary of State for 1895. An examination of the mortality returns made to the Secretary of State, from Wayne county, for 1895, revealed the fact that deaths from smallpox had been duplicated, so that in place of 64 deaths, the records should have shown 18 less, or 46 deaths from smallpox. The reports to the Secretary of the State Board of Health showed 40 deaths from smallpox in Wayne

county, or 6 less than the corrected returns to the Secretary of State would have shown, if corrected for these instances of duplication. Duplication occurred in some instances by the same death being reported from two separate wards of the city of Detroit; and, in other instances, the same death was reported from one or more wards and also from the isolation hospital. From the foregoing statement it is apparent that the returns to the Secretary of this Board were more accurately made than were the returns to the Secretary of State.

The errors of the old law were generally errors of omission, but the example is useful to show that the old system of enumeration was sometimes unreliable in the other direction. The detection of such mistakes, in a vast mass of returns, is practically impossible before compilation.

CHICKENPOX.

WHOOPING COUGH.

DISEASES NOT CLASSED (AT PRESENT) AS DANGEROUS COMMUNI-CABLE DISEASES.

Many diseases in the following list are known to be caused by one or more species of bacteria, and will undoubtedly be added in time to the list of officially defined "dangerous communicable diseases." Pneumonia, influenza, meningitis, tetanus and rabies have, indeed, been placed among dangerous communicable diseases by the State Board of Health, beginning with the year 1895, and a corresponding rearrangement would be made of the tables in this report, were it not for the fact that the present series of mortality statistics will terminate entirely at the close of another year, being displaced by the more reliable results of the new registration law. For the data collected under the new law, which will not be directly comparable with the data in the old series of reports, an entirely new classification has been adopted (the Bertillon system), hence it seemed inexpedient to revise the provisional system for the short period of its remaining use.

Under Brain diseases, Bowel diseases, and corresponding titles, all of the maladies causing diseased conditions of the brain and nervous system, alimentary canal, or other specified organs, are roughly grouped. It must be remembered that infectious diseases, although generally limited to or chiefly affecting some special organ, are elsewhere studied, and also that the titles "cancer" and "tumor" (line numbers 45 and 46) contain deaths from affections of various organs which have not been distributed in accordance with their anatomical seat. For the latter, see Table 71 which specifies the parts of the body affected by neoplastic growths.

DISEASES OF THE BLADDER.

(92) Bladder disease, etc 21,	Combined with diseases of the kidneys (line numbers 58 to 60), the total number of deaths due to disorders of the urinary apparatus may be ascertained. Diabetes
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is separately stated (line number 49), but may be included for comparisons with statistics which embrace this title under diseases of the kidneys. Calculus and cystitis were separately stated in the old classification employed in these reports, but all other diseases of the bladder were placed under "kidney disease, etc."

DISEASES OF THE BOWELS.

(30) Bowel diseases (31) Inflammation of bowels. (32) Diarrhea. (33) Cholera infantum, (34) Dysentery. (35) Peritonitis.	344 212 651 76 107	This is a very important group of causes of death in the consideration of the sanitarian, from the fact that so large a proportion of the cases is from preventable causes, and occurs in infants and children.
(36) Bowel disease, etc		Referring to Table 63. in which the

separate ages at death under 5 years of age are stated, we observe that of the 1,803 deaths from intestinal disorders that occurred in Michigan during the year 1896, no less than 889 or 44.3 per cent, were of infants under 1 year of age; 1,167 of the deaths were of children under 5 years of age, representing a percentage of 64.7. The year was more favorable than usual in this respect.

Some of the cases of inflammation of the bowels, and many of those included in "bowel diseases, etc.," are diarrheal in character. The nature of the returns does not permit of any very exact distinctions being made between those included under different titles. Many of the deaths from diarrhea were originally specified as "summer complaint," a recognized synonym for cholera infantum, while, on the contrary, many cases of ordinary diarrhea in infants were returned as "cholera infantum." These diseases are best studied in the aggregate, and according to their age incidence. Many of the deaths reported as due to "convulsions" are really the effects of intestinal diseases, although nearly every system of statistical nosology follows the old plan of Dr. Farr, and includes such deaths under diseases of the nervous system.

DISEASES OF THE BRAIN AND NERVOUS SYSTEM.

(37) Brain diseases. (38) Apoplexy. (39) Congestion of brain. (40) Inflammation of brain. (41) Epilepsy. (42) Meningitis*. (43) Paralysis. (44) Brain disease, etc.	337 65 298 59 192	There was a slight decrease in the number of deaths reported from this group of causes as compared with the preceding year, but each of the years exceeded any previous years of registration in deaths from diseases of the brain and central nervous system. As shown in Table 69,
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the death rate from diseases of the nervous system has pretty steadily increased during each of the five-year periods, with the exception of the first one, 1870-74, which was marked by an epidemic of cerebrospinal meningitis. The prevalence of epidemic influenza in this State during recent years and its depressing effects upon the inhabitants of advanced ages, have probably tended to increase the deaths of this group.

CANCER AND TUMOR.

(45) Cancer	780	Deaths	from	cancers	and	tumors	are
(46) Tumor	161	studied to					
Total deaths from new growths	941	fusion of t	the two	terms i	in the	ir ordi	ary
use. Pathologically, all cancers are	tumor	rs, but no	tall tu	mors are	e canc	ers; in (com-
mon language, the term "tumor" appe	ears t	o be restr	ricted (o non-m	aligna	ant grow	ths,
or to malignant growths concealed fro	m ob	servation	, such	as cance	er of t	he stom	ach.
In Table 67 and Diagram II the cours	e of c	cancer in	Michig	gan may	be e	xamine	l for
each year of registration, and its con-	stant	and regu	ular in	crease i	n imp	ortance	as a
cause of death will be noted. The sin	uous	regularit	y of th	e curve	and	the abs	ence
of the fluctuations characteristic of the	e infe	ectious dis	seases 1	represen	ted, a	re espec	ially
characteristic. The mortality increase	sed fo	r 1896 as	usual.	-			

An increase in the mortality from cancer is generally indicated for recent years, not only in the Michigan Reports, but in those of other states and countries. It has been claimed that the large increase in the mortality from cancer is more apparent than real, and is due chiefly to more accurate diagnosis of cancers of inaccessible parts of the body.

In Table 71 may be seen the distribution of deaths from cancers and tumors, by sex and according to the parts of the body affected, for the year 1896, and also, for cancers only, for the period of twenty-four years, 1872-95. Of the whole number of deaths reported from cancer in the 24 years, 42.5 per cent were males, and 57.5 per cent females. Excluding from the total number of deaths of males all cases in which the organ affected was unspecified, we have 2,131 cases, of which 1,368, or 64.2 per cent were deaths from cancer of the stomach. Among females, the ratio of deaths from cancer of the stomach was less, being 41.7 per cent; 485 deaths, or 20.4 per cent were from cancer of the breast, and 385 deaths, or 16.2 per cent, were from cancer of the uterus.

DEATHS CAUSED BY CHILDBIRTH.

DEATHS FROM CONVULSIONS."

DIABETES.

^{*} Considered by the State Board of Health, more especially cerebrospinal meningitis, as a dangerous communicable disease.

Table 71.—Deaths returned from cancer in Michigan for the year 1896, and for the twenty-four years 1872-95, inclusive, specifying the part of the body affected.

		Year, 1896.		Twenty-four years, 1872-95.			
Cancer of—	Total.	Total. Males.		Total	Males.	Females.	
All organs	780	327	453	9,800	3,955	5,345	
Abdomen	1	1		1	1		
Arm	1 1	1	i	6 1 24	3 1 2 <u>1</u>	8	
Bowels	13	5	8	5 184	5 69	115	
BrainBreast	23		23	5 510	3 25	2 485	
ChestEar		·		. 3	2	1	
Esophagus Eye Face	18	14	4	4 18 245	2 9 181	2 9 64	
FootGall bladder				4 1	4	1	
Groin Hand Head Heart Hip	1 8 1	1 1 1	• 2	5 5 35 9	4 4 21 2	1 1 14 7	
JawKidnev	2	1	. 1	5 13	4 10	1 3	
Knee jointLegLip	1 1 5	1 1 5		23 10	16 10	7	
Liver Lungs Mouth	32 2	21	11	240 21 93	119 8 62	121 13 81	
Navel Neck	î 1	2	1	42	31		
Nose Omentum Ovaries Palate Pancreas	1	1	1	4 1 3 1 8	4 1 5	1 3 3	
PylorusRectum	<u>-</u>	 5	1	2 49	2 27	22	
ShoulderSideSpleen				2 15 1	2 3	12	
SpineStomach	185 11	106 8	79	2,359 118	1,368 74	991 44	
Testicles				4	4		
TongueTonsils Unspecified parts	428	2	279	33 1 4,791	1.824	14 1 2.967	
UrethraUterus	38	149	38	4,791 1 385	1,024	2,507 1 385	

Note.—Deaths returned from "Tumor" in Michigan, 1896. There were 161 deaths, 40 males and 121 females, so returned. Their distribution, by sex and organs affected was as follows: Abdomen, 1 male, 1 female; back, 1 male; bowels, 3 males, 2 females; brain, 5 males, 3 females; breakt, 1 female; groin, 1 female; heart, 1 male; kidneys, 1 female; liver, 1 male, 1 female; neck, 2 males; ovaries, 11 females; side, 1 female; stomach, 3 males, 9 females; throat, 2 males; uterus, 5 females; unspecified, 21 males, 85 females.

DEATHS FROM "DROPSY."

"FEVER" (UNSPECIFIED FORM) AND MALARIAL FEVER.

DISEASES OF THE HEART AND CIRCULATORY SYSTEM.

(53) Heart diseases	1,491	Very few of the deaths returned from
(54) Pericarditis	77	diseases of the heart specify the exact
(55) Heart disease, etc	389	form of the malady, so that the 1,025
(00) 110410 144410	000	deaths from heart disease were practically

all returned in this indefinite form. This number does not include the 389 deaths from "heart failure," which have been separately compiled since 1891. For preceding years, as shown in Table 65, these deaths were included in heart disease. They are generally equivalent to deaths with cause unspecified,—so returned either through ignorance or carelessness,—and probably imply no actual heart disease. For this reason the statistics of heart disease at present are not comparable with those of years antedating the common use of this pernicious term.

Table 72.—Deaths in Michigan from influenza ("la grippe"), by months, according to the returns for the years 1888-96.

	Total						Ŋ	Months	3.					
Years.	for year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
1888	2									1			1	
1889	176	30	28	17	11	6	7	2	2	4	8	19	41	1
1890	1,084	174	210	154	133	79	60	44	53	36	46	37	56	2
1891	1,076	110	83	96	249	110	62	48	31	48	37	38	160	4
1892	907	351	209	99	58	35	24	18	19	17	19	30	28	
1893	555	43	41	28	26	33	20	14	15	20	24	39	252	
1894	402	82	45	55	39	23	15	14	20	18	26	28	37	
1895	410	19	45	92	87	30	28	20	16	15	12	19	27	
1896	248	13	42	50	32	16	11	6	17	7	6	24	24	

EPIDEMIC INFLUENZA OR "LA GRIPPE." (54) Influenza* 248 Epidemic influenza

DISEASES OF THE KIDNEYS.

(58) Kidney diseases	624	The great majority of deaths returned
(59) Inflammation of kidneys	478	from diseases of the kidneys, especially
(60) Kidney disease, etc	140	those included under the term inflamma-

tion of the kidneys in the table, were specified as due to Bright's disease. The aggregate number of deaths from renal disease for the year exceeded that reported for any previous year of registration. Like heart diseases, kidney diseases seem to be increasing in this State during the period of years covered in Table 65. This may be, as has been observed elsewhere, on account of better diagnosis, and also, in part, from changes of fashion in medical nomenclature. Many deaths that would have been returned simply as "dropsy" in former years would at present be ascribed to some form of Bright's disease.

DISEASES OF THE LIVER.

DISEASES OF THE LUNGS.

(62) Lung diseases	1,88	This very important group does not
(63) Asthma		
(64) Bronchiti	s 18	
(65) Pleurisy.		
(66) Pneumo	nia*	s among the dangerous communicable dis-
. , -	•	eases, owing to its infectious character.
(68) Lung dise	ases, etc	For convenience, however, the number of
(4) Consumption.	 2,099	deaths from consumption is placed below
(-)		the list, and the aggregate number of
Total		deaths from diseases of the lungs stated.

This was 3,982 persons, or nearly a quarter (22.7 per cent) of the entire mortality from specified causes during the year. Pneumonia is now ranked among the infectious diseases, but for reasons already given, it did not seem advisable to change its tabular place in the present Report.

RHEUMATISM.

SEPTIC INFECTION.

^{*} Added to the list of dangerous communicable diseases by the State Board of Health in 1895.

[†] So classed by the Michigan State Board of Health on September 30, 1893.

DISEASES OF THE SPINE.

DISEASES OF THE STOMACH.

(72) Stomach diseases	299	Diseases of the stomach are not usually
(73) Inflammation of stomach	97	
(74) Stomach disease, etc	202	
		number of deaths from cancer of the
stomach has been already referred	to un	nder the subject of cancer, but it is very
probable that many of the deaths rep	orted	d as simply due to "disease of the stomach"
may have been due to cancer.		

SYPHILIS.

UNCLASSIFIED DISEASES.

those collected by supervisors.

Abscess (unspecified), 57; abdominal abscess, 1; abscess (cool), 2; abscess in ear, 1; abscess in head, 1; abscess in side, 1; abscess in throat, 1; abscess of chest, 1; abscess (internal), 2; acute alcoholism, 16; Addison's disease, 2; always sick, 1; amenorrhea, 1; anemia, 5; aneurism, 1; arteries, disease of, 1; army trouble, 1; atheroms, 1; asthenia, 1; bad cold, 7; bad disorder, 1; bled to death, 3; blood clot, 1; blood, congestion of, 1; blood, consumption of, 3; blood-vessel, rupture of, 20; born weak, 6; bronchial catarra, 1; canker, sore mouth (including one "struck through the system"), 10; capillary hemorrhage, 1; carbuncle, 4; catarrh, 14; catarrh in throat, 1; change of life, 6; chill, 2; chronic aliment, 1; cigarette smoking, 1; cold, 14; cold, effects of, 1; cold in head, 1; complication of diseases, 31; congestion, 4; contraction of a cold, 1; cough, 2; cough and cold, 1; cripple when born, 1; cyanosis, 2; deblity, 174; deformed mouth, 1; delirium tremens, 3; died at birth (not necessarily stillborn), 4; dropped dead, 3; car, organic disease of, 1; eczema, 9; "enlargement of some of the insides," 1; epistaxis, 2; exhaustion, 12; exopthalmic goltre, 5; female complaint, 3; female trouble (operation), 1; femur, necrosis of, 1; found dead, 6; gangrene, 29; gangrene of leg, 3; gangrenous throat, 1; general collapse, 2; goltre, 2; grief and trouble, 1; gun-shot wound received in army, 1; hemorrhage, 25; Hodgskins's disease, 1; hydrophobia, 3; hydropyosalpinx, 1; imperfect circulation, 1; inanition, 69; incident to birth, 1; infancy, 9; inflammation, 42; inflammation of leg (acute), 1; innutrition, 2; insomnia, 1; lymphadenoma, 1; malformation, 2; malignant quinsy, 3; malnutrition, 11; mastoid disease, 1; leukemia, 1; lymphadenoma, 1; malformation, 2; malignant quinsy, 3; malnutrition, 11; mastoid disease, 1; inexpect of physician, 1; nerves, neuralgia, 15; nerves, 2; necrosis of ribs, 1; nervous prostration, 45; nervous shock, 1; neuralgia, 15; non-development, 2; non

DEATHS FROM VIOLENCE IN MICHIGAN, 1896.

The category of deaths from violent causes comprises three general heads: (1) Deaths from accidental injuries; (2) suicides, and (3) deaths caused by homicidal violence. All deaths returned simply as due to drowning, poison, etc., the circumstances attending being otherwise unspecified, are presumed to be accidental. Doubtless a few suicidal cases are thus included. Under "homicide" many of the instances are returned as "murder." The statements given in the returns are not sufficiently definite to determine the legal character of the crime involved, and accordingly all are grouped under the general term.

In Table 75 may be found a statement of the number of deaths reported from each of these classes by sex, months of death, and periods of age of decedents, and also, under the general heading "accidental," the numbers returned from the chief causes of accidental death, namely, burning, drowning, heat and sunstroke, gunshotwounds, lightning, mining accidents, poison, railroad accidents and injuries from horses and vehicles.

Table 73 presents a detailed statement of the total number of deaths in the State in 1896 from these causes, and from certain minor causes included in one group under the heading. "all other casualties." The distribution of the principal causes of violent deaths is given for the counties of the State in Table 74, and Table 76 gives the deaths and death rates per 100,000 population from accidents, suicides and homicides for each year of registration since 1870. Five-year averages enable the general tendency of the returns of violent deaths to be readily appreciated.

Table 73.—Deaths from violence in Michigan, 1896, manner specified.

Manner of death.	Number.	Manner of death.	Number.
TOTAL NUMBER OF DEATHS FROM VIOLENT CAUSES	1,289	Freezing	, ,
I.—ACCIDENTAL. II.—SUICIDAL. III.—HOMICIDAL.	1,115 157 17	Rattlesnake bite Scalding Surgical operations. Wall, Fall of (Opera House, St. Joseph) Miscellaneous and unspecified.	23 46
I.—A CCIDENTAL	1,115	II.—SUICIDAL	
Burning Drowning Gunshot Heat and sunstroke Lightning Mining accidents Poison Railroad injuries	154 51 8 19 44 59 76	Burning Drowning Hanging Poison Morphine Unspecified poison	10 18 13
Vehicles and horses	34	Unspecified poison	17 1 1
Asphyxia Birth, Injury at Cyclone Electric shock Explosion, Boller Exposure Falling trees Fractures.	18 4 37 3 8 5 36	III.—Homicidal. Fractured skull Gunshot "Murdered"—not further speci- fied	17 1 1

Table 74.—Deaths from violence in Michigan, by counties, 1896.

	from					L-A	cciden	its.						
State and countles.	Total deaths 1	Total acci- dents.	Burning.	Drowning.	Gunshotr	Heat and sun- stroke.	Lightning.	Mining.	Poison.	Railroad.	Vehicles, etc.	All others.	II.—Suicides.	IIIHomicides-
State	1,289	1,115	81	154	51	8	19	44	59	76	34	589	157	15
Alcona	5	5	1	2			1177					2	-	
Alger	4	4	1	-				******				4		
Allegan	21	16	2	3	1		1		20000	1	2	6	5	
Alpena	10	10			1							10		
Antrim	8	5			*****							5	3	
Arenac	2 2	2		1	1									
Baraga		2 6	******	1	1				*****					
Barry	10		3	1	*****		1	*****	1	1		21	1	
Bay Benzie	41	40	3	14			******		1	1	777	3		
Berrien	36	34	1	8	2				1	4		18	2	
Branch	8	5	1						1			3	3	
Calhoun	20	16	4	····i	3		1			2		5	4	
Cass	5	4				1			1	1		1 3	1	
Charlevoix		8	******	2	3							3	1	
Cheboygan	8	7	4	1					1			1	1	
Chippe wa	11	11	2	5					1			3 2	1	****
Clare	12	11		3 2	2 2		*****		******	1		6	1	
Clinton Crawford	0											0		
Delta	13	13		4						4	1	4	GA.	
Dickinson	16	16	1	2 1	1	1	1	6		1		3		
Eaton	12	7	1						3			2	5	
Emmet	10	8	1	1					*****	1	1	4	2 2	
Genesee	26	24	1	4	******	*****	*****		1	5	1	12	2	
Gladwin Gogebic	27	25		···i						2	******	2	1 2	
Gd. Traverse	4	3	1	2	*****		48-5-	19				-	ĩ	
Gratiot	10	9	3	~	1		1		1		1	8	Î	
Hillsdale	6	6	1	1					1			3		
Houghton	39	35		6				6				23	3	1
Huron	12	10	1	2					1		1	5	2	
Ingham	11	10	*****	1			****		1			8	1	
IoniaIosco	17	13	1	2	1	*****	1			5	1	5 4	1	
Iron	.7	7		2	1	177		3	(7)	1		1		130
Isabella	7	7	223	4	1	*****	1	3		2	*****	4	10000	
Jackson	18	7 16	2		2					3	1225	9	2	
Kalamazoo	21	15	2 2 1	1	2 2				1	3		7	6	
Kalkaska	1	1	1											
Kent	61	49	7	3	1	3			4	3	5	23	11	
Keweenaw	2 3	1										1		
Lake	3	3	1		1		*****		*****		*****	1	2	
Lapeer Leelanau	16	11 5	*****	1 2	1				1	*****		9 2	2	
	* 1			15								1		
Lenawee	18	16	1		1		1		i	2 2	2	9 2	2	
Luce	7	i		1			*****	1000	1	2	10000	1		
Mackinac	3	3								i	10000	3		1

Table 74.—CONCLUDED.

	from					I.—A	cclde	nts.						
Counties.	Total deaths f	Total acci- dents.	Burning.	Drowning.	Gunshot.	Heat and sun- stroke,	Lightning.	Mining.	Poison.	Railroad.	Vehicles, etc.	All others.	II.—Suicides.	IIIHomicides.
Manistee	14	13		1 7 2	1						1	10	1	
Marquette	49	46	3	7				8	1	3	*****	24	2	1
Mason	11	11		2	1		1		*****	1	1	5		
Mecosta	6	6		1	*****				*****	2		8		
Menominee	17	11		2	1		******					8	6	
Midland	5	5			2					1		2 3		
Missaukee	3	3										3		650
Monroe	15	15	6		1					1		5		
Montealm	10	9	1	2					*****	1		5	1	
Montmorency	3	3			1				1	*****		1		
Muskegon	16	12		2		1	1		2			7	4	
Newaygo	6	4		1	1					1		1	2	
Oakland	48	46		2	1					2		41	2 2 2	
Oceana	9	2 3	1									1	2	
Ogemaw	3	3		2				1						•••
Ontonagon	12	11		4	1	34954	1	1	1	2		1	1	
Osceola	3	3									2	1		-
Oscoda	1	1										1		
Otsego	1	1							*****			1		
Ottawa	16	11	4	1	2					1		3	4	
Presque Isle	2	1					1						1	
Roscommon										*****				
Saginaw	49	44	2	9	2				2 2	4	3	22	5	
Sanilac	14	12					1		2	1		8	2	
Schoolcraft	4	4		1					*****			3	******	
Shia wassee	7	7	1		2				1			3		
St. Clair	30	23	2	5	1					1		14	7	
St. Joseph	23	18		1	2		1		4	3	2	5	5	
Tuscola	15	14	1	1	1				3	1	1	6	1	
Van Buren	13	10	3	2							1	4	3	
Washtenaw	18	13		1						5	4	3	4	3
Wayne	231	205	10	24	4	3	3		19	3	1	138	23	1
Wexford	7	6	1		Sec. 0.	1	1	100.5	2			2	1	

The great uniformity in the death rates from violence in Michigan for successive years may be seen in Table 76 on page 174. The five-year averages range only from 46.2 to 51.8 per 100,000 estimated population, and the rates for individual years, although exhibiting a slightly wider range of variation, are not far from the mean. We may note that for 1896 the rate (55.7) was less than that for the preceding year. Both years were considerably above the average. A marked decline in the rate of deaths from suicides (6.8) may be observed from the maximum rate in 1894 (7.9), although this rate still remains high for Michigan.

Table 75.—Deaths from violence in Michigan during the year.

						1	Mon	ths o	f de	aths	, 189	6.			
Causes of deaths, 1896.	Sex.	Total deaths 1896.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
VIOLENT DEATHS	Total Male Female Unknown	1,289 997 291 1	84 63 21	72 57 15	74 58 15	116 88 28	134 90 44	130 101 29	128 101 27	145 116 29	104 91 13	103 78 25	93 68 25	103 83 20	3
I.—Accidental	Total Male Female Unknown	1,115 849 265 1	70 52 18	67 52 15	62 46 15 1	94 71 23	123 81 42	118 90 28	107 85 22	126 101 25	89 78 11	85 60 25	79 56 23	92 74 18	3
Burning	Total Male Female	81 35 46	6 2 4	5 1 4	4 2 2	5 2 3	6 1 5	9 3 6	10 4 6	4 2 2	4 2 2	8 2 6	16 11 5	4 3 1	
Drowning	Total Male Female	154 141 13	9	3	4 3 1	13 10 3	17 17	24 22 2	21 21	28 25 3	10 10	11 8 3	4 3 1	9	1
Gunshot	Male Female	51 48 3	4 4	1	4 4	5 4 1	3 2 1	3	1	1	3	5	11 10 1	10 10	
Heat and sunstroke.	Total Male Female	8 7 1						2 1 1	2 2	3 3	1				
Lightning	Total Male Female	19 18 1	1			5	1	1	3	7 6 1	2 2				
Mining accidents	Total Male Female	44 44	2 2	9	6	5	5	2 2	4	4	2 2	1	3	1	
Poison	Total Male Female	59 31 28	3 1 2	5 22 33	2	2	4 2 2	6 3 3	10 7 3	8 5 3	4 2 2	1	6 3 3	8 5 3	=
Railroad injuries	Yotal Male Female	76 62 14	5 2 3	6	4 3 1	4 4	5 4 1	5	12 10 2	10 8 2	5 4 1	10 9 1	6 4 2	4 3 1	::::
Vehicles and horses	Male	34 27 7	2		2 1 1	5 4 1	1 1	6 4 2	6	4		4 4		4 4	
All other casualties	Total Male Female Unknown	589 436 152 1	39 32 7	38 30 8	36 27 8 1	50 37 13	81 49 32	60 46 14	38 27 11	57 43 14	58 52 6	45 30 15	33 22 11	52 39 13	2
II.—SUICIDAL	Male Female	157 136 21	12 9 3	5	11 11	15 13 2	11 9 2	12 11 1	16 12 4	19 15 4	13 12 1	18 18	14 12 2	11 9 2	==
III.—Homicidal	Total Male Female	17 12 5	2 2		1	7 4 3			5 4 1	===	2 1 1				

1896, by sex, months of deaths and ages of decedents.

A	ges	by ?	vear	s				A	ges of	dece	dent	s by	five	-уез	ar pe	eriod	ls, 18	396.				
0.	1.	2.	3.	4.	0 to 4.	5 to 9.	10 to 14.	15 to 19.	20 to 24,	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 to 49.	50 to 54.	55 to 59.	60 to 64.	65 to 69.	70 to 74.	75 to 79.	80 +	Unknown.
51 32 19	18 10 8	35 22 13	28 13 10	31 21 10	158 98 60	70 51 19	66 57 9	99 81 18	91 66 25	114 102 12	91 78 13	70 54 16	86 72 14	75 58 17	70 57 13	59 50 9	65 51 14	42 33 9	41 26 15	32 25 7	31 17 14	20 21
51 32 19	18 10 8	34 21 13	23 13 10	30 20 10	156 96 60	68 51 17	64 55 9	88 76 12	84 60 24	110 98 12	71 59 12	57 43 14	71 61 10	55 40 15	52 43 9	44 35 9	48 36 12	37 29 8	32 17 15	24 17 7	28 14 14	26
3 2 1	4	5 2 3	10 7 3	7 4 3	29 19 10	10 4 6	2 1 1	4 3 1	8 1 7	7 3 4		3 1 2	1 1	6 1 5			2	3	1 1	2 1 1	2 1 1	1
2 2	2 1 1	7 3 4	3	5	19 14 5	19 17 2	24 24	25 23 2	18 15 3	14 14	9	4	8	1	4	1	1	2 1 1	1		1	-
						3	11 11	11 11	6 4 2	4 4	3 2 1		2 2	1	3		1	1		2 2		
1	1				2 1 1	1		1		2 2				===		-	1	1		<u>'</u>		
						2 2	2 1 1	2 2	3 3		1	1	1	1	2 2		2 2	1			1	-
							1	2 2	5 5	12 12	6	1	5	6	1	1	1					1
3 1 2	3	3 2 1	1	1	11 4 7			4 1 3	2 2	22	1 1	7 5 2	11 7 4	5 3 2		6 4 2	2 2	3 2 1	3 3			
=		1	1		2 1 1	2	2 2	5 3 2	7 5 2	12 12	7 6 1	4 4	6	6 5 1	7 5 2	2 2	4 3 1	5 3 2	1	2 2	1	
						3 3	3 3	2 1 1		1	2 2		3	4 1 3	2 2	3 2 1	2 2	2 2		4 2 2	3	
42 26 16	8 5 3	18 13 5	8 3 5	17 10 7	93 57 36	28 21 7	19 12 7	32 29 3	35 27 8	56 50 6	42 33 9	37 27 10	34 29 5	25 21 4	33 26 7	31 25 6	32 23 9	19 18 1	26 12 14	14 10 4	20 7 13	13
							1	10 5 5	6 5	4 4	17 16 1	13 11 2	14 11 3	19 18 1	17 13 4	14 14	16 14 2	5 4 1	8 8	8 8	3 3	
::::		1 1		1	2 2	2	1	1	1		3 3		1	1	1	1	1		1			1

Table 76.—Deaths from violence in Michigan, accidental, suicidal, and homicidal, as returned for each of the years, 1870-96; with proportions to deaths from disease and rates per 100,000 population; with averages for quinquennial and 25-year periods.

	Total from vi	deaths olence.	I. Acc	idental.	II. S	aicidal.	Hon	II. nicidal.	Rates	per 100,0	00 popu	lation.
Years and periods.	Num- ber.	Rate per i,000 deaths from dis- ease.*	Num- ber.	Per cent of violent deaths.	Num- ber.	Per cent of violent deaths.	Num- ber.	Per cent of violent deaths.	Total vio- lence.	I. Acci- dental.	II. Sui- cidal.	III. Homi- cidal.
870	495	56.1	456	92.1	34	6.9	5	1.0	41.8	38 5	2.9	
871	539	68.1	490	90.9	40	7.4	9	1.7	44.1	40.1	3.3	.
872	541	48.1	498	92.1	35	6.5	8	1.5	43.0	39.6	2.8	
873	685	58.1	629	91.8	39	5.7	17	2.5	52.8	48.5	3.0	1.
874	656	66.5	591	90.1	53	8.1	12	1.8	49.2	44.8	4.0	
875	646	69.8	577	89.3	52	8.0	17	2.6	46.7	41.7	3.8	1
876	747	75.4	681	91.2	54	7.2	12	. 1.6	52.1	47.5	3.6	
877	654	64.9	575	87.9	66	10.1	13	2.0	44.0	38.7	4.4	
878	691	69.6	617	89.3	63	9.1	11	1.6	45.0	40.2	4.1	
879	697	60.5	621	89.1	59	8.5	17	2.4	43.9	39.1	8.7	1
880	875	67.2	804	91.9	65	7.4	6	.7	53.5	49.1	4.0	
881	966	60.7	895	92.7	57	5.9	14	1.4	57.1	52 9	3.4	
882	778	58.2	704	90.5	62	8.0	12	1.5	44.6	40.3	3.6	
883	940	68.8	831	88.4	91	9.7	18	1.9	52.2	46.2	5.1	1
884	898	59.3	769	85.6	104	11.6	25	2.8	48.4	41.5	5.6	1
885	. 907	65.9	787	86.8	91	10.0	29	3.2	47.9	41.6	4.8	1
886	923	60.3	811	87.9	82	8.9	30	3.3	47.7	41.9	4.2	1
887	1,044	64.2	910	87.2	105	10.1	29	2.8	52.9	46.1	5.3	1
.888	1,033	57.0	918	88.9	101	9.8	14	1.4	51.3	45.6	5.0	
.889	1,096	65.4	970	88.5	94	8.6	32	2.9	53.4	47.2	4.6	1
.890	1,085	61.6	963	88.8	108	10.0	14	1.3	51.8	46.0	5.2	
891	. 993	54.8	899	90.5	79	8.0	15	1.5	46.6	42.2	3.7	
1892	1,144	65.1	1,020	89.2	107	9.4	17	1.5	52.8	47.1	4.9	
1893	1,175	65.6	1,050	89.4	109	9.3	16	1.4	53.3	47.6	4.9	
894	. 1,213	71.5	1,020	84.1	176	, 14.5	17	1.4	54.1	45.5	7.9	
1895	1,301	70.5	1,114	85.6	174	13.4	13	1.0	57.1	48.9	7.6	
896	1,289	73.6	1,115	86.5	157	12.2	17	1.3	55.7	48.2	6.8	
Av. 1870-7	4 583	58.7	533	91.4	40	6.9	10	1.7	46.3	42.3	3.2	
Av. 1875-7	687	67.8	614	89.4	59	8.6	14	2.0	46.2	41.3	4.0	
Av. 1880-8	4 891	62.6	801	89.9	76	8.5	15	1.7	51.1	45.9	4.4	
Av. 1885-8	9 1,001	62.4	879	87.8	95	9.5	27	2.7	50.7	44.5	4.8	1
Av. 1890-9	1,122	63.6	990	88.2	116	10.3	16	1.4	51.8	45.7	5.4	
Av. 1870-9	4 857	63.0	763	89.0	77	9.0	16	1.9	49.2	43.9	4.4	

^{*}Compared with line 2, Table 65.

CLIMATIC CONDITIONS AFFECTING CAUSES OF DEATH.

The usual series of tables representing the meteorological conditions of the year is presented for comparison with mortality data. The latter, unfortunately, are unreliable by months, as has been fully explained on a previous page. Consequently only general comparisons are possible, and great care must be taken to avoid confusing the peculiarities of imperfect registration with the effects of climate. Fortunately we shall not have to depend in future on imperfect mortality statistics, as the results of the new registration law operative in August, 1897, have already furnished results of the highest value for meteorological study. These are presented in the *Michigan Monthly Bulletin of Vital Statistics*, beginning with the month of September, 1897, the meteorological data being provided by the Michigan State Weather Service co-operating with the U.S. Weather Bureau of the Department of Agriculture. The data in the present Registration Report have been kindly supplied by the Michigan State Board of Health, together with the following remarks on the meteorological characteristics of the year:

METEOROLOGICAL CHARACTERISTICS OF THE YEAR 1896 IN MICHIGAN.

At the several meterological stations in different parts of the State, the average temperature for 1896 was 1.64° higher than the average for the preceding 19 years; the annual range of the temperature was 5° less than in 1895, and 3° less than the annual range for the preceding 18 years; the average monthly range of temperature was 2° less than in 1895, and 1° greater than the average for the preceding 19 years. The average daily range of temperature was 1.70° less than in 1895, and .59 less than the average for the preceding 17 years; the average cloudiness was 6 per cent greater than in 1895, and 1 per cent greater than the average for the preceding 19 years; the rainfall (rain and melted snow) was 5.59 inches greater than in 1895, and 2.01 inches less than the average for the preceding 19 years; the average atmospheric pressure was .012 of an inch greater than in 1895, and .001 of an inch greater than the average for the preceding 19 years.

Table 77.—Average **temperature** by year and months in 1896, compared with annual and monthly averages for 1895, and for the 19 years, 1877-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

			A	verage	temp	eratu	re,—d	egrees	Fahr	enheit			
Years, etc.	Ann'al av.	Jan	Feb.	Mar.	Apr.	Мау.	June	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 19 years, 1877-95	46.25	21.28	23.23	29.83	44.57	55.90	66.47	70.76	68.12	61.56	49.23	36.04	28.05
1895	46.37	19.04	17.27	27.39	47.23	59.49	70.60	70.10	70.11	65.92	44.54	36.03	28.68
1896	47.89	24.88	24.57	28.11	51.33	64.77	68.12	71.02	69.61	58.57	45.80	38.70	29.24

Table 78.—Average daily range of temperature by year and months in 1896, compared with annual and monthly averages for 1895, and for the 17 years, 1879-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

		Ave	erage	daily r	ange	of tem	perati	ire,—d	egree	s Fahi	renhei	t.	
Years, etc.	Ann'al av.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 17 years, 1879-95	18.07	15.73	17.23	17.44	19.16	20.28	20.68	21.18	20.49	20.12	17.19	14.10	13.22
1895	19.18	- 1	16.07 15.56	6.6.45		22.41 21.82	24.11	23.58 19.50	21.93		200	1000	7

Table 79.—Comparison of the extremes and of the range of temperature, by year and months, in 1896, with annual and monthly averages for the preceding 6 years, 1890–95, and for the 19-year period, 1877–95. Observations made with registering thermometers by observers for the State Board of Health and for the U. S. Signal Service. These comparisons, etc. are tor groups of several stations in Michigan. (Data supplied by State Board of Health.)

				Ext	ren	nes	and	l ra	nge	of	ten	pe	rati	ure,	−d	egr	ees	Fa	hre	nhe	it.*			
Year and Months.		1890			1891		3	1892		(1	1893			1894		3	1895		y	ear	r 19 's, 95.		1896	L
	Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Highest,	Lowest.	Range,	Highest.	Lowest.	Range.
Year	100	-26	126	100	-14	114	102	-24	126	97	-26	123	102	-26	128	100	-28	128	100	-26	126	98	-25	123
January	66	-14	80	52	-10	62	57	-22	79	49	-26	75	57	-18	75	50	-12	62	54	-20	74	45	-25	70
February	63	-8	71	55	-14	69	52	-24	76	44	-23	67	54	-26	80	54	-28	82	55	-21	76	59	-22	81
March	59	-26	85	58	-8	66	64	-13	77	66	-6	72	79	-2	81	69	-16	85	66	-13	79	69	-16	85
April	80	1	79	87	10	77	79	13	66	80	9	71	88	12	76	82	17	65	83	9	74	87	7	80
May	91	21	70	85	25	60	85	27	58	88	27	61	94	30	64	98	26	72	90	23	66	98	33	65
June	98	32	66	97	31	66	102	34	68	96	36	60	98	33	65	99	37	62	96	33	62	91	37	54
July	98	39	59	95	37	58	97	41	56	96	43	53	102	37	65	100	38	62	98	40	58	95	39	56
August	100	34	66	100	37	63	95	37	58	97	38	59	99	32	67	97	36	61	97	36	60	96	35	61
September	90	27	63	93	35	58	92	30	62	89	22	67	99	29	70	98	28	70	94	29	65	88	22	66
October	80	24	56	87	21	66	82	23	59	84	22	62	80	20	60	80	10	70	83	19	64	77	15	62
November	68	0	68	65	-3	68	64	5	59	68	6	62	67	-7	74	72	-1	73	69	1	68	67	-3	70
December	50	-6	56	60	8	52	58	-11	69	62	-14	76	60	-19	79	63	-24	87	58	-10	68	59	-16	75

^{*}For the 20 years, 1877-96, the highest temperature was 105°, at Battle Creek, September 9, 1884; the lowest was — 36°, at Manistique, January 27, 1885.

Table 80.—Average **absolute humidity,** by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 19 years, 1877-95. **These** averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

		Αl	solute	humi	dity, —	grains	of va	por in	a cub	ic foot	of ai	r.	
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 19 years, 1877-95	3.44	1.44	1.53	1.83	2.79	3.94	5.53	6.02	5.73	4.93	3,49	2.31	1.81
1895	3 35 3.65	1.19	1.17	1.49	2.90	4.42 5.03	5.56 5.64	5.39 6.43	5.87 6.40	5.37 4.66	2.76	2.23° 2.60	1.82

Table 81.—Average **relative humidity**, by year and months, in 1896, **compared** with annual and monthly averages for 1895, and for the 18 years, 1878–95. **These** averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

			R	elativ	e hum	idity,-	-per c	ent of	satur	ation.			
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec
Av. 18 years, 1878-95	76	83	83	79	71	70	73	71	73	75	76	80	83
1895	74 77	80 83	78 79	75 76	70 74	70 72	66 72	66 76	72 78	72 80	72 76	79 81	82 82

Table 82.—Average per cent of **cloudiness**, by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 19 years, 1877-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

					Per	cent	of elo	udines	s,		C		
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 19 years, 1877-95	55	70	64	57	52	50	47	40	42	44	57	69	74
1895	50	68	57	48	48	44	36	45	38	38	44	65	73
1896	56	79	65	52	52	41	39	48	41	61	50	77	71

Table 83.—Inches of **rain and melted snow** by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 19 years, 1877-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

				In	ches o	of rain	and	melted	snov	٧.			
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	Jul .	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 19 vears, 1877-95	34.66	2.25	2.45	2.19	2.54	3.60	3.71	2.93	3.01	3.08	3.10	3.12	2.71
1895	27.06 32.65	2.95 1.61	0.72	0.97	1.51 2.91	3.04	1.34	1.47	3.23	2.53 4.92	1.18	3.48	4.65

Table 84.—Average amount of atmospheric **ozone** (**day**) by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 19 years, 1877–95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

			Ozone	by da	y,—de	egree	of cole	oratio	n of te	est-pap	er.*		
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 19 years, 1877-95	3.46	3.66	3.77	3.79	3.60	3.71	3.47	3.03	3.40	3.16	3.17	3.21	3.47
1895	3.67 3.71	4.18	4.05 4.12	4.10 4.20	4.07	4.17	3.51 3.67	2.91 3.03	3.92 4.00	3.14 3.15	3.04	3.19 3.45	3.74 3.78

^{*}In this table allowance has been made for difference in sensitiveness of different lots of test-paper. Scale =10 degrees.

Table 85.—Average amount of atmospheric **ozone** (**night**) by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 19 years, 1877-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

			Ozone	by nig	ght,—ć	legree	of co	loratio	on of	test-pa	per.*		
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 19 years, 1877-95	3.63	3.96	4.28	4.25	3.99	3.92	3.64	3.03	3.19	2.98	3.29	3.45	3.86
1895	4.09	4.15	4.60	4.65	4.55	4.62	100	3.57	4.27	3.49 3.54	3.33	3.46 3.95	4.24

^{*}In this Table allowance has been made for difference in sensitiveness of different lots of test-paper. Scale = 10 degrees,

Table 86.—Average **velocity of the wind** in miles per hour, by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 14 years, 1882-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

*******			A	verage	e velo	city o	f wind	,—mil	es per	hour.			
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Av. 14 years, 1882-95.	9.7	10.8	10.8	10.7	10.4	9.5	7.9	7.9	7.6	8.8	9.7	10.8	11.1
1895	10.2 9.8	11.8 9.8	11.7	12.2 12.0	9.3 11.2	9.5 10.3	8.3 7.4	8.4 7.6	8.1 8.0	10.7 9.2	11.9 9.0	10.2 12.3	10.5

Table 87.—Average **atmospheric pressure**, by year and months, in 1896, compared with annual and monthly averages, for 1895, and for the 19 years, 1877-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

4442 44		10	Avera	ge atr	nosph	eric p	ressur	e,—inc	hes o	f mer	eury.		
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	May	June	July	Α.	Sept.	Oct.	Nov.	Dec.
Av. 19 years, 1877-95.	29.136	29.152	29.164	29, 132	29. 120	29.095	29.097	29.115	29.136	29.175	29.154	29.150	29.148
1895	100	1.000	11.00	Surf-1 "1	4744.4	Town Williams	236.4	Mary Carry			29, 152 29, 153		127.7

Table 88.—Average daily range of atmospheric pressure, by year and months, in 1896, compared with annual and monthly averages for 1895, and for the 14 years, 1882–95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

**********		Av	erage	daily	range	of be	arome	ter,—li	nches	of me	ercury		
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	O t.	Nov.	Dec.
Av. 14 years, 1882-95.	.211	.805	.306	.256	.217	.165	.135	.127	.131	.165	.212	.248	.268
1896	.201	.316	.266	.238	.152 .176	.150	100	.157	.135	7 5 1 5	200	.212	.236

Table 89.—Average monthly range of atmospheric pressure, by year and nunths, in 1896, compared with annual and monthly averages for 1895, and for the 14 years, 1882-95. These averages are for groups of several stations in Michigan. (Data supplied by State Board of Health.)

			R	ange	of bar	omet	er,—in	ches c	of men	cury.			
Years, etc.	Annual av.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Av. 14 years, 1882-95	.962	1.285	1.336	1.127	1.049	.804	.706	.595	.601	.792	1 017	1.116	1.140
1895	.888	1.446		.916 1.075	1	.667	.562	.720	.527	10000	1.039	1000	1.000



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